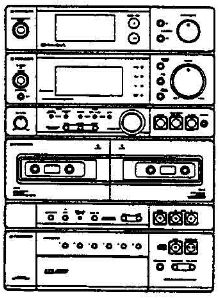
PIONEER

The Art of Entertainment

Service Manual



ORDER NO.
RRV1023

STEREO MULTI-PLAY CD CASSETTE DECK RECEIVER

XR-P740M
XR-P640M
XR-P340M

STEREO CD CASSETTE DECK RECEIVER

XR-P740
XR-P640
XR-P340

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model						Power Requirement	The voltage can be converted by the following method.
	XR-P740M	XR-P740	XR-P640M	XR-P640	XR-P340M	XR-P340		
SD	○	○	○	○	○	○	AC110V/120−127V/ 220V/240V	With the voltage selector
YPW	○	—	○	—	○	○	AC240V	———
KU	—	—	—	—	○	—	AC120V	———
KC	—	—	—	—	○	—	AC120V	———

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T−DFF DEC. 1993 Printed in Japan

CHAPTER 1

1.1 SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).
When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

NOTICE
(FOR CANADIAN MODEL ONLY)
Fuse symbols -▮▭⊞- (fast operating fuse) and/or -▮▭⊠- (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE
(POUR MODÈLE CANADIEN SEULEMENT)
Les symboles de fusible -▮▭⊞- (fusible de type rapide) et/ou -▮▭⊠- (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

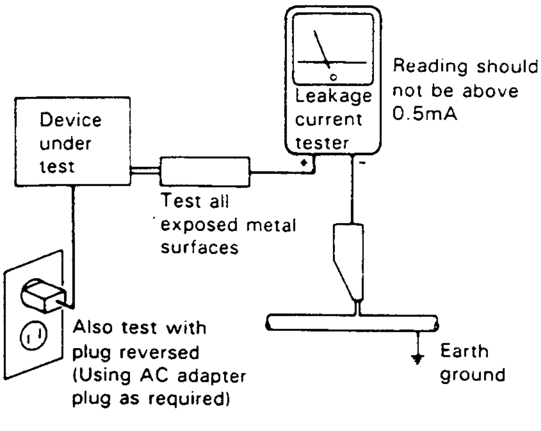
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.


Device under test
Leakage current tester
Reading should not be above 0.5mA
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

(FOR EUROPEAN MODEL ONLY)

VARO!
AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

ADVERSEL:
USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION UNDGÅ UDSAETTELSE FOR STRÅLING.

VARNING!
OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.

LASER
Kuva 1
Lasersateilyn varoitusmerkki

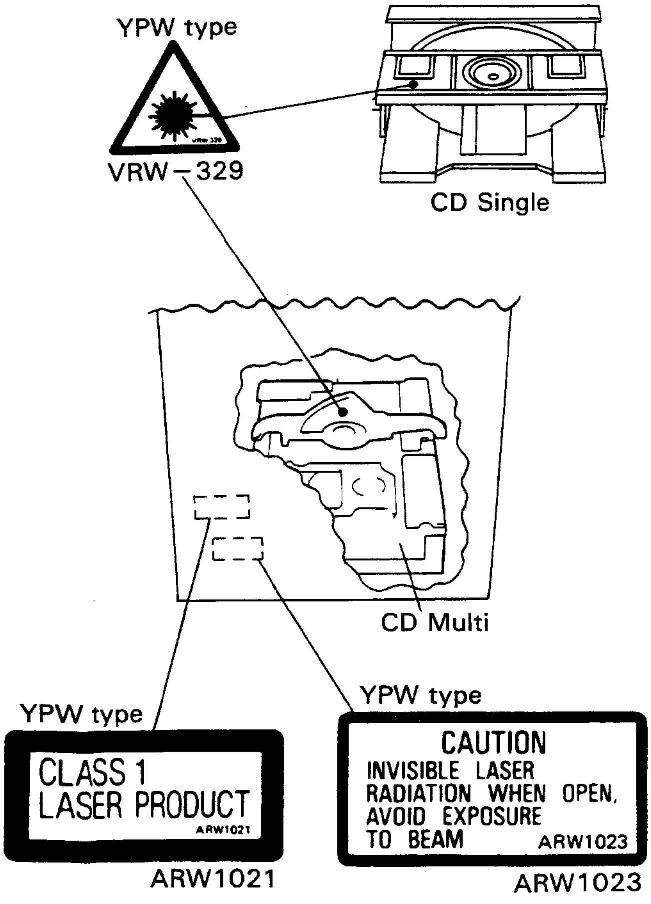
WARNING!
DEVICE INCLUDES LASER DIODE WHICH EMITS INVISIBLE INFRARED RADIATION WHICH IS DANGEROUS TO EYES. THERE IS A WARNING SIGN ACCORDING TO PICTURE 1 INSIDE THE DEVICE CLOSE TO THE LASER DIODE.

LASER
Picture 1
Warning sign for laser radiation

IMPORTANT
THIS PIONEER APPARATUS CONTAINS LASER OF CLASS 1.
SERVICING OPERATION OF THE APPARATUS SHOULD BE DONE BY A SPECIALLY INSTRUCTED PERSON.

LASER DIODE CHARACTERISTICS
MAXIMUM OUTPUT POWER: 5 mw
WAVELENGTH: 780-785 nm

LABEL CHECK



FOR CD MULTI

Additional Laser Caution

1. Laser Interlock Mechanism
   The ON/OFF (ON : low level, OFF : high level) status of S601 (LPS1) and S602 (LPS2) switches for detecting the loading state is detected by the system microprocessor, and the design prevents laser diode oscillation except when both switches (LPS1 and LPS2) are ON (low level or clamped state).
   Thus, interlock will no longer function if switches S601 (LPS1) and S602 (LPS2) are deliberately shorted.
   The interlock also does not operate in the test mode*.
   Laser diode oscillation will continue, if pin 1 of M51593FP (IC101) on the PRE-AMP BOARD assembly loaded on pickup assembly are connected to GND, or pin 19 is connected to low level (ON), or else the terminals of Q101 are shorted to each other (fault condition).

2. When the cover is opened with the servo mechanism block removed and turned over, close viewing of the objective lens with the naked eye will cause exposure to a Class 1 laser beam.

'92M1A

* Refer to page 1−29.

FOR CD SINGLE

Additional Laser Caution

1. Laser Interlock Mechanism
   The position of the switch (S601) for detecting loading state is detected by the system microprocessor, and the design prevents laser diode oscillation when the switch (S601) is not on CLMP terminal side (CLMP signal is OFF or high level.).
   Thus, the interlock will no longer function if the switch (S601) is deliberately set to CLMP terminal side. (low level).
   The interlock also does not function in the test mode*.
   Laser diode oscillation will continue, if pin 1 of M51593FP (IC101) on the PRE-AMP BOARD ASSY mounted on the pickup assembly is connected to GND, or pin 19 is connected to low level (ON), or else the terminals of Q101 are shorted to each other (fault condition).

2. When the cover is opened, close viewing of the objective lens with the naked eye will cause exposure to a Class 1 laser beam.

* Refer to page 1−29.

1.2 SPECIFICATIONS

STEREO CD CASSETTE DECK RECEIVER/STEREO MULTI-PLAY CD CASSETTE DECK RECEIVER: XR-P740/XR-P740M/XR-P640/XR-P640M/XR-P340/XR-P340M

Amplifier section

<XR-P740/XR-P740M>

FRONT

Continuous Average Power Output is 70 Watts* per channel, min., at 8 ohms from 50 Hertz with no more than 1 % total harmonic distortion.**

Continuous Power Output (RMS)	100 W + 100 W (1 kHz, T.H.D. 10%, 8 Ω)
Peak Music Power	1050 W

REAR

Continuous Power Output (RMS)	15 W (1 kHz, T.H.D. 10%, 16 Ω x 2)

CENTER

Continuous Power Output (RMS)	15 W (1 kHz, T.H.D. 10%, 16 Ω x 2)

<XR-P640/XR-P640M>

FRONT

Continuous Average Power Output is 70 Watt* per channel, min., at 8 ohms from 50 Hertz with no more than 1 % total harmonic distortion.**

Continuous Power Output (RMS)	100 W + 100 W (1 kHz, T.H.D. 10%, 8 Ω)
Peak Music Power	950 W

REAR

Continuous Power Output (RMS)	15 W (1 kHz, T.H.D. 10%, 16 Ω x 2)

<XR-P340/XR-P340M>

FRONT

Continuous Average Power Output is 33 Watts* per channel, min., at 8 ohms from 50 Hertz with no more than 1 % total harmonic distortion.**

Continuous Power Output (RMS)	50 W + 50 W (1 kHz, T.H.D. 10%, 8 Ω)
Peak Music Power	500 W

FM/AM tuner section

FM Tuner Section

Frequency Range (9 kHz/10 kHz step)	7.5 MHz to 108 MHz
Antenna Input	75 ohms unbalanced

AM Tuner Section

Frequency Range	
With 10 kHz step	530 kHz to 1,700 kHz
With 9 kHz step	531 kHz to 1,602 kHz
Antenna	Loop Antenna

Miscellaneous

Power Requirements	
Singapore model	220-230/240 V, 50/60 Hz
Other model	110/120-127/220/240 V, 50/60 Hz
Power Consumption	
(XR-P740/XR-P740M)	444 W
(XR-P640/XR-P640M)	432 W
(XR-P340/XR-P340M)	276 W
Dimensions	260 (W) x 371.5 (H) x 295 (D) mm (XR-P740/XR-P740M/XR-P640/XR-P640M) 260 (W) x 310 (H) x 295 (D) mm (XR-P340/XR-P340M)
Weight (without package)	
(XR-P740M/XR-P640M)	9.5 kg
(XR-P740/XR-P640)	8.8 kg
(XR-P340M)	7.4 kg
(XR-P340)	6.7 kg

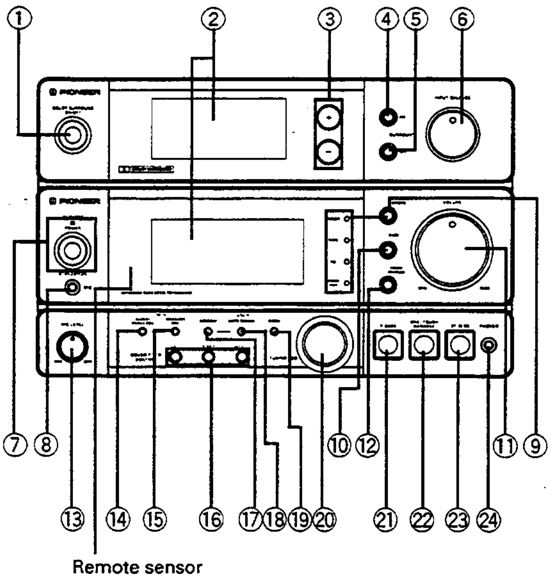
CD Section

Type	Compact disc digital audio system
Wow and Flutter	Limit of measurement (±0.001 % W.PEAK) or less (EIAJ)

Cassette deck section

Systems	4 track, 2-channel stereo
Heads	Recording/playback head x 1 Playback head x 1 Erasing head x 1
Motor	DC servo motor x 1
Tape type	TYPE I (Normal) tape/TYPE II (CrO_2) tape

1.3 PANEL FACILITIES



This illustration shows model XR-P640.

RECEIVER

The XR-P340/XR-P340M is not equipped with the buttons ①–⑥.

① **DOLBY SURROUND ON/OFF button (XR-P640/XR-P640M only)**
①' **CENTER/REAR button (XR-P740/XR-P740M only)**
② **Display**
③ **REAR LEVEL (+, –) buttons (XR-P640/XR-P640M only)**
③' **CENTER/REAR LEVEL (+, –) buttons (XR-P740/XR-P740M only)**
④ **SURROUND ON button (XR-P640/XR-P640M only)**
④' **CENTER MODE button (XR-P740/XR-P740M only)**
⑤ **SURROUND OFF button (XR-P640/XR-P640M only)**
⑤' **DD MODE button (XR-P740/XR-P740M only)**
⑥ **INPUT BALANCE control (XR-P640/XR-P640M only)**
⑥' **BALANCE (L,R) control (XR-P740/XR-P740M only)**
⑦ **POWER STANDBY/ON switch and STANDBY indicator**

This is the switch for electric power.
ON: When set to the ON position, power is supplied and the unit becomes operational.
STANDBY: When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness. (The STANDBY indicator lights.)

⑧ **Microphone jack (MIC)**
⑨ **FUNCTION (*DEMO) button and indicators**

Each time this button is pressed, the function changes in the following sequence (The selected function is displayed in the display window and indicator.):

→ TUNER → TAPE → CD
VIDEO/AUX ←

⑩ **BAND button**
⑪ **VOLUME control**
⑫ **FREQ/STATION button**
⑬ **MIC LEVEL control**
⑭ **CLOCK/CLOCK ADJ button**
⑮ **WAKE-UP/REC button**
⑯ **SOUND FIELD CONTROL buttons (HALL, DISCO, MOVIE)**
⑰ **MEMORY button**
⑱ **AUTO TUNING button**
⑲ **MONO button**
⑳ **TUNING JOG knob**
㉑ **P. BASS button**
㉒ **ONE-TOUCH KARAOKE button**
㉓ **ST WIDE button (XR-P740/XR-P740M/XR-P640/XR-P640M)**
㉓' **SURROUND & ST WIDE button (XR-P340/XR-P340M)**
㉔ **Headphones jack (PHONES)**

*

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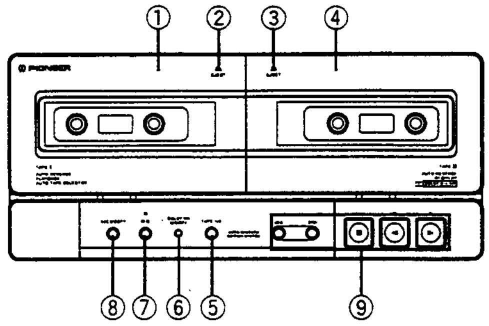
DOLBY and the double-D symbol DD are trademarks of Dolby Laboratories Licensing Corporation.

TAPE DECK



TAPE DECK

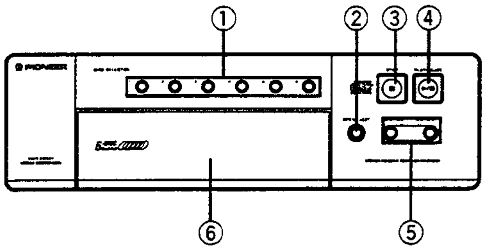
- ① **TAPE I cassette door**
- ② **TAPE I EJECT section (⏏)**
- ③ **TAPE II EJECT section (⏏)**
- ④ **TAPE II cassette door**
- ⑤ **TAPE 1/2 selector button**
- ⑥ **DOLBY* NR B/C OFF button (XR-P740/XR-P740M and XR-P640/XR-P640M)**
  Each time this button is pressed, DOLBY NR setting changes B → C → OFF.
- ⑥' **DOLBY* NR ON/OFF button (XR-P340/XR-P340M only)**
  Each time this button is pressed, DOLBY NR system turns ON and OFF.
- ⑦ **Rec pause button (● II)**
- ⑧ **ASES (Auto Synchro Editing System)/COPY button**
- ⑨ **TAPE operation buttons (PLAY ◄ ►, STOP ■, Fast ◄◄ ►►)**

■ Auto Function

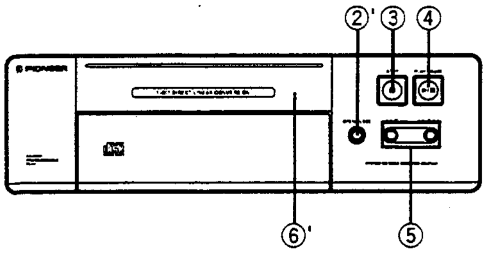
This model is equipped with "Auto Function" operation, so when the switch for PLAY/PAUSE, DISC SELECTOR 1-6, RND, TAPE 1/2, PLAY (tape), or BAND is pressed, the function switches automatically. Use the FUNCTION button to select the component connected to the VIDEO/AUX IN jacks, since Auto Function is not effective for this.

NOTE:
The function cannot be switched during recording and tape copying.

MULTI-PLAY CD PLAYER



CD PLAYER



CD PLAYERS

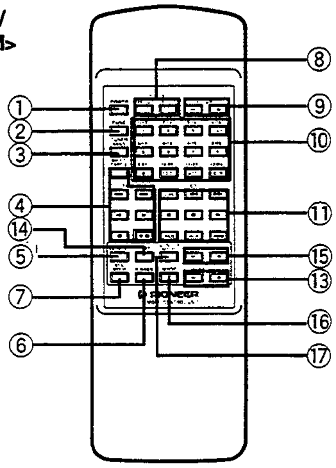
- ① **DISC SELECTOR buttons (1~6)**
- ② **OPEN/EJECT button**
- ②' **OPEN/CLOSE button**
- ③ **STOP button (■)**
- ④ **PLAY/PAUSE button (►/II)**
- ⑤ **Manual/Track search buttons (|◄◄ • ◄◄, ►► • ►►|)**
- ⑥ **Magazine slot door**
- ⑥' **Disc tray**

*

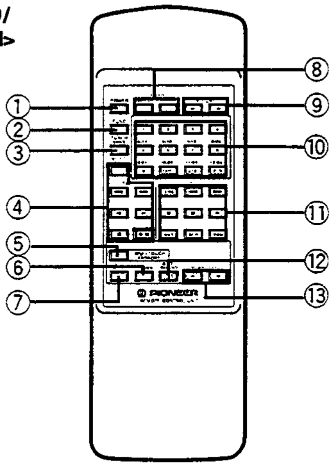
- *Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.*
- *"DOLBY" and the double-D symbol DD are trademarks of Dolby Laboratories Licensing Corporation.*

REMOTE CONTROL UNIT

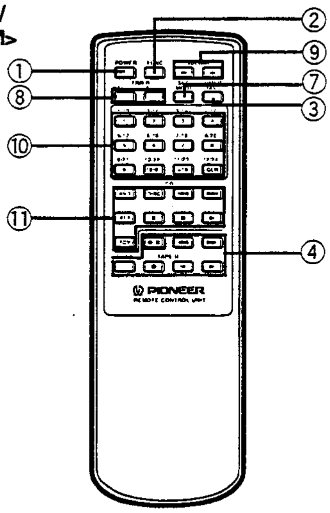
<XR-P740/ XR-P740M>



<XR-P640/ XR-P640M>



<XR-P340/ XR-P340M>



REMOTE CONTROL UNIT

① **POWER button**

② **Function button (FUNC)**
Each time this button is pressed, the function changes in the following sequence:

→ TUNER → TAPE → CD →
VIDEO/AUX ←

③ **TUNER BAND button**

④ **TAPE operation buttons (SHIFT TAPE I, Fast ◄◄ ►►, Play ◄ ►, Stop ■, Rec pause ● II)**
To operate TAPE I, press the desired deck operation button while pressing SHIFT TAPE I. (Except for the Rec pause ● II button)

⑤ **ONE-TOUCH KARAOKE button (XR-P640/XR-P640M only)**

⑤ **KARAOKE button (XR-P740/XR-P740M only)**

⑥ **P. BASS button (Except for XR-P340/XR-P340M)**

⑦ **SFC MODE button**

⑧ **TIMER control buttons (WAKE-UP, SLEEP)**

⑨ **VOLUME (–/+) buttons**

⑩ **Number buttons**
These buttons are used for selecting track numbers of a CD and scanning preset stations.

⑪ **CD operation buttons (DISC, Track search I◄◄ ►►I, Pause II, Stop ■, Play ►, RND (Random), REP (Repeat), PGM (Program))**

⑫ **DD SURROUND button (XR-P640/XR-640M only)**

⑬ **REAR LEVEL (–/+) buttons (Except for XR-P340/XR-P340M)**

⑭ **Test tone button (TEST) (XR-P740/XR-P740M only)**

⑮ **CENTER LEVEL (–/+) buttons (XR-P740/XR-P740M only)**

⑯ **DD MODE button (XR-P740/XR-P740M only)**

⑰ **CENTER MODE button (XR-P740/XR-P740M only)**

1.4 DISASSEMBLY

■ CD MECHA ASSY DIAGNOSIS AND REPLACEMENT

1. Remove the cover.
2. OPEN the tray and lift the tray cap, pulling the bottom of the tray cap toward you. After removing the tray cap, CLOSE the tray.
3. Remove the VOL knob and 2 screws (BBZ30P080FZK) holding the VR assy in place.
4. Remove the 3 screws between the front panel and the chassis.
   L/R sides: CBZ30P080FMC ×2
   Bottom side: BBZ30P080FZK ×1
5. Remove the lead wire from the cassette mecha assy from the chassis.
   Screw: BBZ30P080FZK ×1
6. Remove the front panel from the chassis (watching out for the claw on the left and right), and open the side of the AF CD assy. (Refer to Fig. 1)

NOTE:
Do not remove the rear panel and AF CD assy at this time.

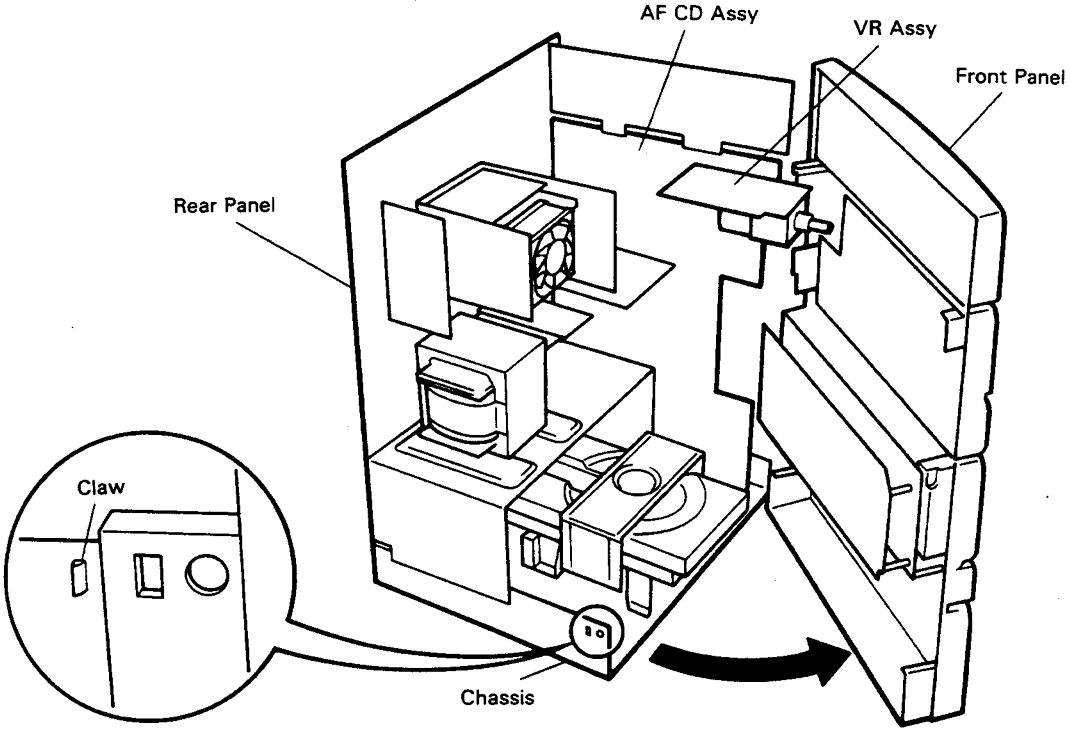


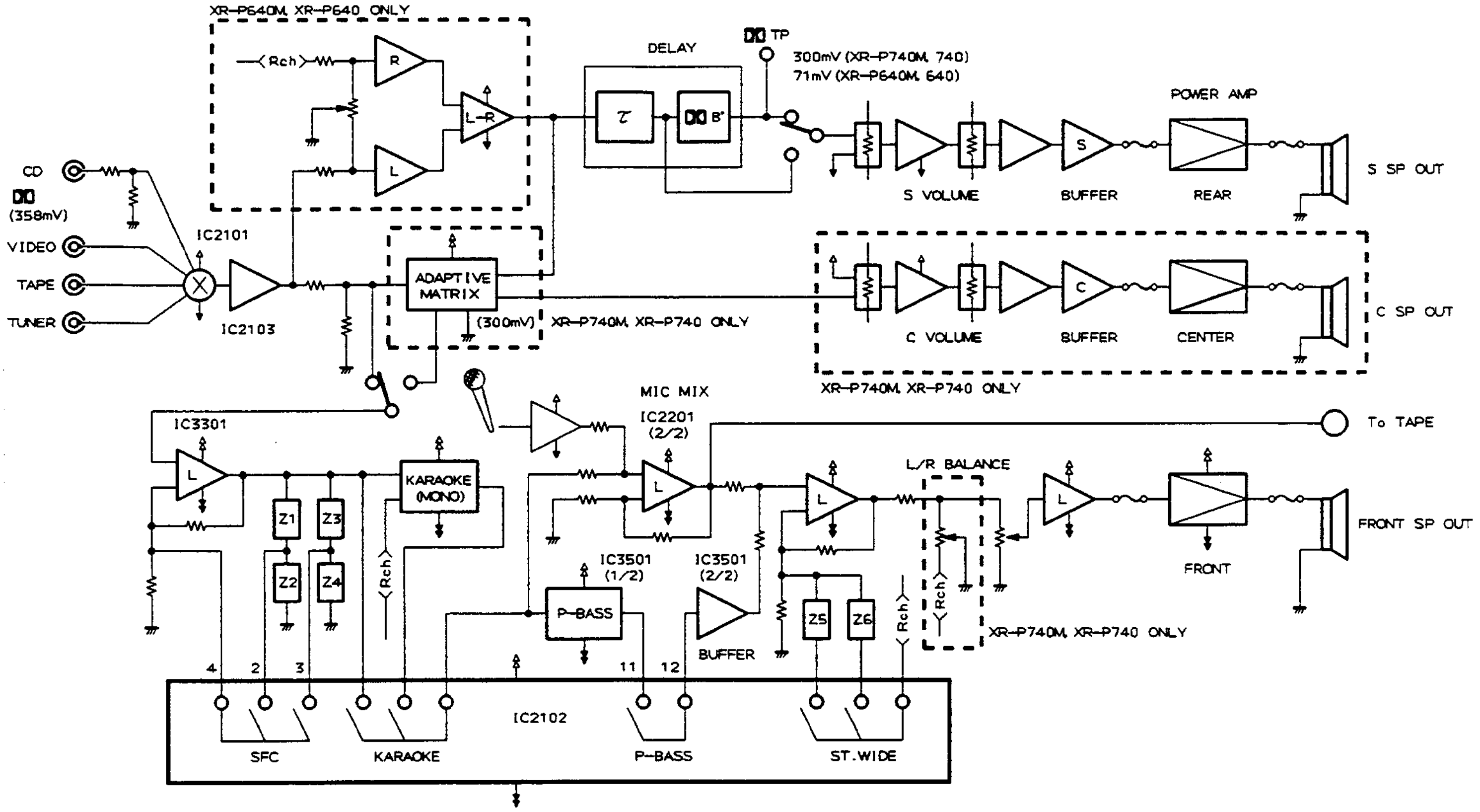
Fig. 1

Under these conditions most of the PCB diagnosis and parts replacement can be performed.

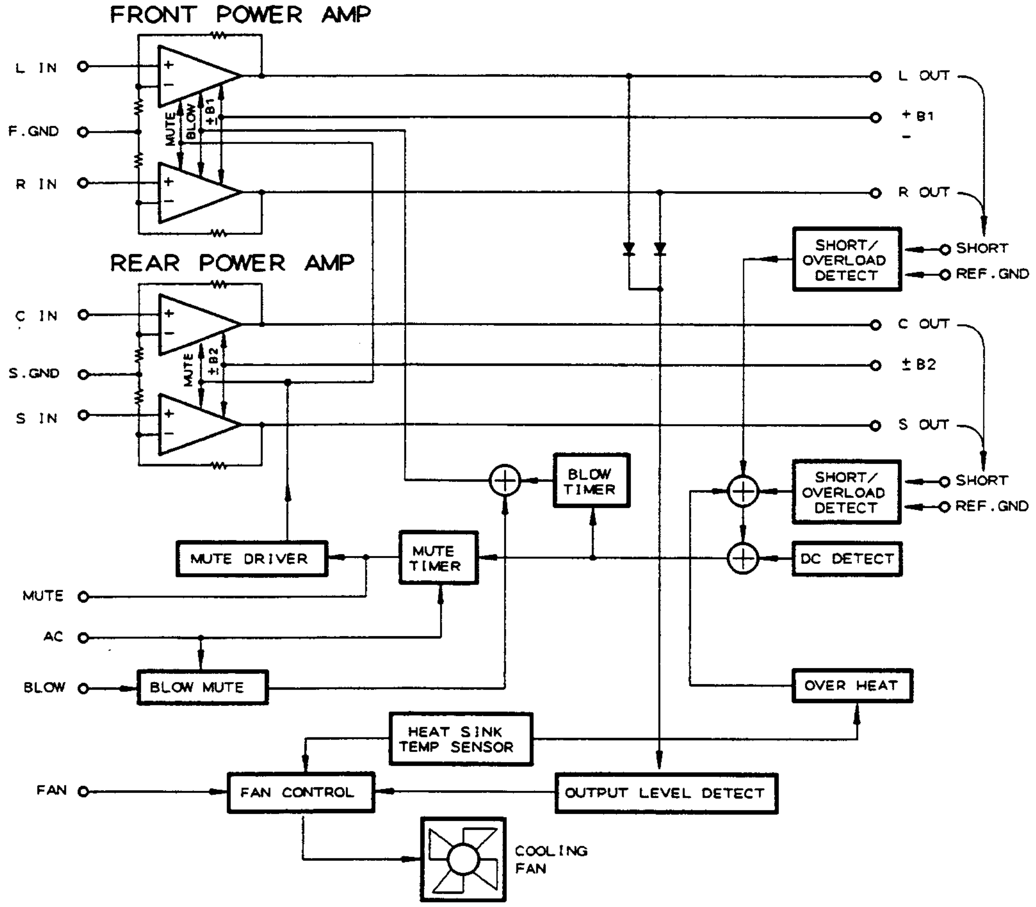
■ REMOVAL OF AF CD ASSY

1. Under the conditions of the previous paragraph, remove the rear panel and AF CD assy.
   (Do not separate the rear panel and AF CD assy.)
   XR−P340M (except KU type) and XR−P340 ··· Between rear panel and chassis.
   Screw: BBZ30P080FZK ×2
   XR−P740M, 740, 640M, 640 and XR−P340M/KU ··· Between rear panel and trans frame.
   Screw: BBZ30P080FZK ×3

1.5 BLOCK DIAGRAM


XR-P640M, XR-P640 ONLY
Rch
R
L
L-R
DELAY
τ
B'
TP
300mV (XR-P740M, 740)
71mV (XR-P640M, 640)
POWER AMP
S
S VOLUME
BUFFER
REAR
S SP OUT
CD
(358mV)
VIDEO
TAPE
TUNER
IC2101
IC2103
ADAPTIVE MATRIX
(300mV)
XR-P740M, XR-P740 ONLY
C
C VOLUME
BUFFER
CENTER
C SP OUT
XR-P740M, XR-P740 ONLY
MIC MIX
IC2201 (2/2)
To TAPE
IC3301
L
KARAOKE (MONO)
Z1
Z2
Z3
Z4
Rch
L/R BALANCE
FRONT
FRONT SP OUT
IC3501 (1/2)
IC3501 (2/2)
P-BASS
BUFFER
Z5
Z6
Rch
XR-P740M, XR-P740 ONLY
4
2
3
11
12
IC2102
SFC
KARAOKE
P-BASS
ST.WIDE

POWER AMP MODULE SECTION


FRONT POWER AMP
L IN
F.GND
R IN
MUTE
BLOW
±B1
L OUT
+B1
-
R OUT
REAR POWER AMP
C IN
S.GND
S IN
MUTE
±B2
C OUT
±B2
S OUT
SHORT/ OVERLOAD DETECT
SHORT
REF.GND
SHORT/ OVERLOAD DETECT
SHORT
REF.GND
BLOW TIMER
MUTE DRIVER
MUTE TIMER
DC DETECT
MUTE
AC
BLOW
BLOW MUTE
OVER HEAT
HEAT SINK TEMP SENSOR
FAN
FAN CONTROL
OUTPUT LEVEL DETECT
COOLING FAN

- Pin Function of Power Amp Module

Connector	No.	Name	I/O	Description
CN7101	1	+12V. M	O	+12V separate system stabilized output
	2	UNREG −12	I	Unstabilized power input for −12V
	3	AC	I	AC detection input; for power ON/OFF and MUTE.
	4	−12V	O	Stabilized power output for −12V
	5	MUTE	I/O	Mute external input; outputs internal mute conditions; cancels forced mute.
	6	REF. GND	I	GND for protective circuit; reference GND for short detection
	7	BLOW	I	BLOW circuit external output; ON at ±0.5V or more.
	8	REG. GND	I	Reference GND for stabilized power source
	9	UNREG +5	I	Unstabilized power input for +5.6V
	10	UNREG +12	I	Unstabilized power input for +12V and +12V. M
	11	+5.6V	O	+5.6V stabilized output
	12	+12V	O	+12V stabilized output
CN7102	1	C IN	I	Center signal input
	2	S. GND	I	Signal input GND; floating interior type
	3	S IN	I	Surround signal input
	4	OVERLOAD	I	Short detection input for Surround and Center channels
	5	+B2	I	Power supply (+) for Surround and Center channels
	6	−B2	I	Power supply (−) for Surround and Center channels
	7	C OUT	O	Center speaker output
	8	S OUT	O	Surround speaker output
CN7502	1	REF. GND	I	Reference GND for short detection
	2	L OUT	O	Left speaker output
	3	R OUT	O	Right speaker output
	4	FAN	I	Forced fan circuit input (LOW speed)
	5	+B1	I	Power supply (+) for L/R channels
	6	−B1	I	Power supply (−) for L/R channels
	7	SHORT	I	Short detection input for L/R channels
	8	L IN	I	Left signal input
	9	F. GND	I	Signal input GND; floating interior type
	10	R IN	I	Right signal input

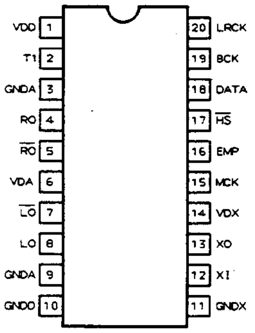
1.6 IC INFORMATION

- *The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.*

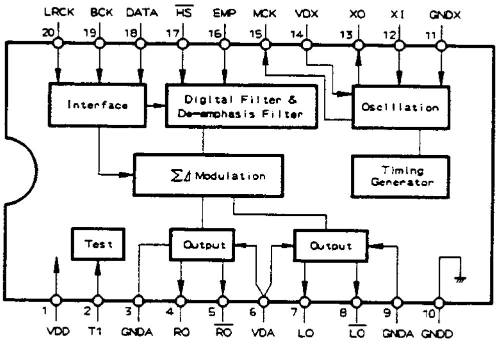
■ TC9268F (IC8401 : AF CD ASSY)

- **Σ-Δ Modulation-Type DA Converter with Built-in 8-fold Oversampling Digital Filter**

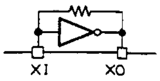
- Pin Assignment (Top View)


VDD 1
T1 2
GNDA 3
RO 4
$\overline{RO}$ 5
VDA 6
$\overline{LO}$ 7
LO 8
GNDA 9
GNDD 10
20 LRCK
19 BCK
18 DATA
17 $\overline{HS}$
16 EMP
15 MCK
14 VDX
13 XO
12 XI
11 GNDX

- Block Diagram


LRCK
BCK
DATA
$\overline{HS}$
EMP
MCK
VDX
XO
XI
GNDX
20
19
18
17
16
15
14
13
12
11
Interface
Digital Filter & De-emphasis Filter
Oscillation
ΣΔ Modulation
Timing Generator
Test
Output
Output
1
2
3
4
5
6
7
8
9
10
VDD
T1
GNDA
RO
$\overline{RO}$
VDA
LO
$\overline{LO}$
GNDA
GNDD

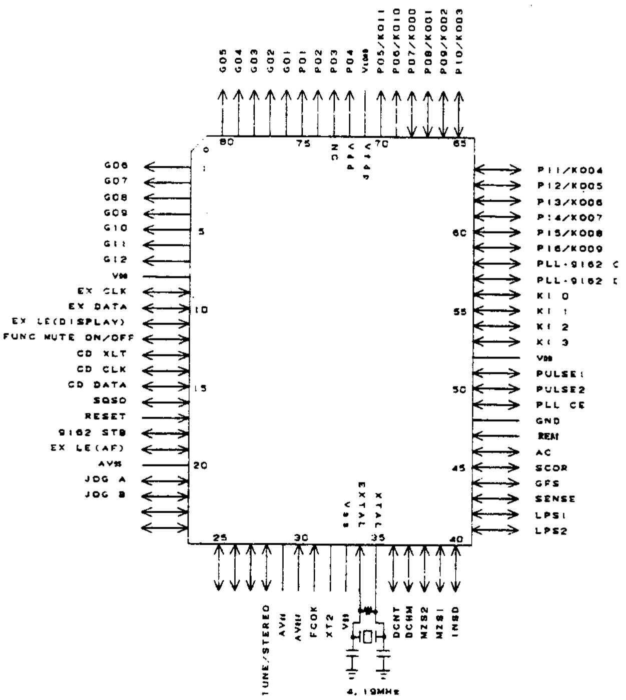
- Pin Function

No.	Symbol	I/O	Description	Remarks
1	VDD	–	Digital part power supply terminal	
2	T1	I	Test terminal; normally used on "L"	
3	GNDA	–	Analog part ground terminal for R channel	
4	RO	O	R channel data right output terminal	
5	$\overline{RO}$	O	R channel data inverse output terminal	
6	VDA	–	Analog part power supply terminal	
7	$\overline{LO}$	O	L channel data inverse output terminal	
8	LO	O	L channel data right output terminal	
9	GNDA	–	Analog part ground terminal for L channel	
10	GNDD	–	Digital part ground terminal	
11	GNDX	–	Crystal-oscillating part ground terminal	
12	XI	I	Crystal oscillator connection terminal; oscillates clock needed by system	
13	XO	O		
14	VDX	–	Crystal-oscillating part power terminal	
15	MCK	O	System clock output terminal	
16	EMP	I	De-emphasis filter control terminal; "H": de-emphasis filter ON, "L": de-emphasis filter OFF	
17	$\overline{HS}$	I	Standard/double-speed operating mode changeover terminal; "H": standard operation, "L": double-speed operation	
18	DATA	I	Data input terminal	
19	BCK	I	Bit clock input terminal	
20	LRCK	I	LR clock input terminal	

PD4493A (IC1901 : DISPLAY ASSY for MULTI CD)

● System Control Micro-computer

● Pin Assignment (Top View)


G05
G04
G03
G02
G01
P01
P02
P03
P04
VLOAD
P05/K011
P06/K010
P07/K000
P08/K001
P09/K002
P10/K003
80
75
NC
VDD
VLOAD
70
65
G06
G07
G08
G09
G10
G11
G12
VDD
EX CLK
EX DATA
EX LE(DISPLAY)
FUNC MUTE ON/OFF
CD XLT
CD CLK
CD DATA
SQSO
RESET
9162 STB
EX LE(AF)
AVSS
JOG A
JOG B
1
5
10
15
20
P11/K004
P12/K005
P13/K006
P14/K007
P15/K008
P16/K009
PLL-9162 C
PLL-9162 D
KI 0
KI 1
KI 2
KI 3
VDD
PULSE1
PULSE2
PLL CE
GND
REM
AC
SCOR
GFS
SENSE
LPS1
LPS2
60
55
50
45
40
VSS
EXTAL
XTAL
25
30
35
TUNE/STEREO
AVDD
AVREF
FCOK
XT2
VSS
DCNT
DCHM
MZS2
MZS1
INSD
4.19MHz

● Pin Function

No.	Name	Function	I/O	Description
1	FIP6	6G	P	FL grid
2	FIP5	7G		
3	FIP4	8G		
4	FIP3	9G		
5	FIP2	10G		
6	FIP1	11G		
7	FIP0	12G		
8	VDD	VDD	–	Connected to +5V.
9	$\overline{\text{SCK0}}$	EX CLK	N	Extension port serial clock output
10	SO0	EX DATA	N	Extension port serial data output
11	P25	EX LE (DISPLAY)	C	Extension port (display system) latch pulse
12	P24	POWER ON/OFF	C	POWER ON/OFF
13	P23	CD XLT	C	LSI control data latch pulse
14	$\overline{\text{SCK1}}$	CD CLK	C	LSI control data serial clock
15	SO1	CD DATA	C	LSI control data serial output
16	SI1	SQSO	I	Subcode Q data serial input
17	$\overline{\text{RESET}}$	–	–	Reset input
18	P74	9162 STB	N	9162 strobe output
19	P73	EX LE (AF)	N	Extension port (AF system) latch pulse
20	AVss	AVss	–	Connected to GND.
21	ANI7	JOG A	I	JOG Input
22	ANI6	JOG B		
23	ANI5	–	A/D	Spectrum analyzer input
24	ANI4	–		
25	ANI3	–		
26	ANI2	–		
27	P11	–		
28	P10	TUNE/ STEREO	A/D	TUNE/STEREO status discrimination input
29	AVDD	AVDD	–	Connected to +5V.
30	AVREF	AVREF	–	
31	P04	FCOK	I	Focus OK input
32	XT2	–	O	Open
33	Vss	–	–	Connected to GND.
34	X1	–	I	Connected to Oscillator (4.19MHz).
35	X2	–	O	
36	P37	DCNT	I	Disc count pulse input
37	P36	DCHM	I	Disc selector home SW
38	P35	MZS2	I	Magazine discrimination SW input
39	P34	MZS1		
40	P33	INSD	I	Slider inside SW input
41	P32	LPS2	I	Load position discrimination input
42	P31	LPS1		

No.	Name	Function	I/O	Description
43	P30	SENS	I	LSI operating status multi-mode input
44	P03	GFS	I	Frame/synch/lock input
45	INTP2	SCOR	I	Subcode synch SO + SI input
46	INTP1	AC	I	AC input
47	INTP0	REM	I	Remote control signal input
48	IC	–	–	Connected to GND.
49	P72	PLL CE	N	PLL latch pulse
50	P71	PULSE2	I	Tape 2 reel pulse input
51	P70	PULSE1	I	Tape 1 reel pulse input
52	V_{DD}	–	–	Connected to +5V.
53	P127	–	I	Key scan input
54	P126	–		
55	P125	–		
56	P124	–		
57	P123	PLL 9162 DATA/ KO11	P	PLL and 9162 serial data
58	P122	PLL 9162 CLK/ KO10	P	PLL and 9162 clock
59	FIP27	P16/KO9	P	FL segment and key scan output
60	FIP26	P15/KO8	P	
61	FIP25	P14/KO7	P	
62	FIP24	P13/KO6	P	
63	FIP23	P12/KO5	P	
64	FIP22	P11/KO4	P	
65	FIP21	P10/KO3	P	
66	FIP20	P9/KO2	P	
67	FIP19	P8/KO1	P	
68	FIP18	P7/KO0	P	

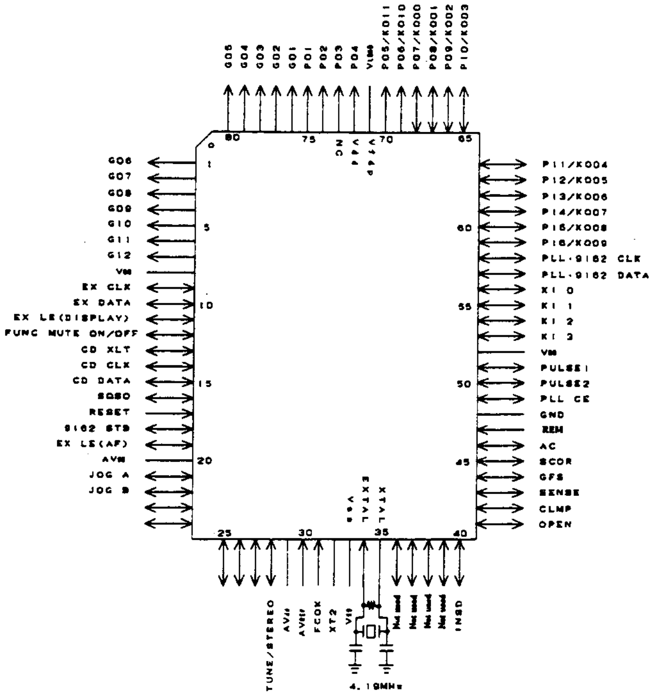
No.	Name	Function	I/O	Description
69	FIP17	P6	P	FL segment
70	FIP16	P5	P	
71	V_{LOAD}	–	–	Connected to −30V.
72	FIP15	P4	P	FL segment
73	FIP14	P3	P	
74	FIP13	P2	P	
75	FIP12	P1	P	
76	FIP11	1G	P	FL grid
77	FIP10	2G	P	
78	FIP9	3G	P	
79	FIP8	4G	P	
80	FIP7	5G	P	

Note)
I : Input
A/D : Analog Input
O : Cmos Output
N : Nch Open Drain Output
P : Pch Open Drain Output

■ PD4492A (IC1901 : DISPLAY ASSY for SINGLE CD)

● System Control Micro-computer

- Pin Assignment (Top View)


G05
G04
G03
G02
G01
P01
P02
P03
P04
P05/K011
P06/K010
P07/K000
P08/K001
P09/K002
P10/K003
80
75
NC
70
65
G06
G07
G08
G09
G10
G11
G12
VSS
EX CLK
EX DATA
EX LE(DISPLAY)
FUNC MUTE ON/OFF
CD XLT
CD CLK
CD DATA
SQSO
RESET
9162 STB
EX LE(AF)
AVSS
JOG A
JOG B
1
5
10
15
20
P11/K004
P12/K005
P13/K006
P14/K007
P15/K008
P16/K009
PLL·9162 CLK
PLL·9162 DATA
KI 0
KI 1
KI 2
KI 3
VSS
PULSE1
PULSE2
PLL CE
GND
REM
AC
SCOR
GFS
SENSE
CLMP
OPEN
60
55
50
45
40
25
30
35
TUNE/STEREO
AVdd
AVref
FCOK
XT2
Vss
XTAL
EXTAL
Not used
Not used
Not used
Not used
INSD
4.19MHz

- Pin Function

No.	Name	Function	I/O	Description
1	FIP6	6G	P	FL grid
2	FIP5	7G		
3	FIP4	8G		
4	FIP3	9G		
5	FIP2	10G		
6	FIP1	11G		
7	FIP0	12G		
8	V_{DD}	V_{DD}	–	Connected to +5V.
9	$\overline{\text{SCK0}}$	EX CLK	N	Extension port serial clock output
10	SO0	EX DATA	N	Extension port serial data output
11	P25	EX LE (DISPLAY)	C	Extension port (display system) latch pulse
12	P24	POWER ON/OFF	C	POWER ON/OFF
13	P23	CD XLT	C	LSI control data latch pulse
14	$\overline{\text{SCK1}}$	CD CLK	C	LSI control data serial clock
15	SO1	CD DATA	C	LSI control data serial output
16	SI1	SQSO	I	Subcode Q data serial input
17	$\overline{\text{RESET}}$	–	–	Reset input
18	P74	9162 STB	N	9162 strobe output
19	P73	EX LE (AF)	N	Extension port (AF system) latch pulse
20	AVss	AVss	–	Connected to GND.
21	ANI7	JOG A	I	JOG Input
22	ANI6	JOG B		
23	ANI5	–	A/D	Spectrum analyzer input
24	ANI4	–		
25	ANI3	–		
26	ANI2	–		
27	P11	–		
28	P10	TUNE/ STEREO	A/D	TUNE/STEREO status discrimination input
29	AV_{DD}	AV_{DD}	–	Connected to +5V.
30	AV_{REF}	AV_{REF}	–	
31	P04	FCOK	I	Focus OK input
32	XT2	–	O	Open
33	Vss	–	–	Connected to GND.
34	X1	–	I	Connected to Oscillator (4.19MHz).
35	X2	–	O	
36	P37	–	C	Not used
37	P36			
38	P35			
39	P34			
40	P33	INSD	I	Slider inside SW input
41	P32	OPEN	I	OPEN completion SW input
42	P31	CLAMP	I	CLAMP completion SW input

No.	Name	Function	I/O	Description
43	P30	SENS	I	LSI operating status multi-mode input
44	P03	GFS	I	Frame/synch/lock input
45	INTP2	SCOR	I	Subcode synch SO + SI input
46	INTP1	AC	I	AC input
47	INTP0	REM	I	Remote control signal input
48	IC	–	–	Connected to GND.
49	P72	PLL CE	N	PLL latch pulse
50	P71	PULSE2	I	Tape 2 reel pulse input
51	P70	PULSE1	I	Tape 1 reel pulse input
52	V_{DD}	–	–	Connected to +5V.
53	P127	–	I	Key scan input
54	P126	–		
55	P125	–		
56	P124	–		
57	P123	PLL 9162 DATA/ KO11	P	PLL and 9162 serial data
58	P122	PLL 9162 CLK/ KO10	P	PLL and 9162 clock
59	FIP27	P16/KO9	P	FL segment and key scan output
60	FIP26	P15/KO8	P	
61	FIP25	P14/KO7	P	
62	FIP24	P13/KO6	P	
63	FIP23	P12/KO5	P	
64	FIP22	P11/KO4	P	
65	FIP21	P10/KO3	P	
66	FIP20	P9/KO2	P	
67	FIP19	P8/KO1	P	
68	FIP18	P7/KO0	P	

No.	Name	Function	I/O	Description
69	FIP17	P6	P	FL segment
70	FIP16	P5	P	
71	V_{LOAD}	–	–	Connected to −30V.
72	FIP15	P4	P	FL segment
73	FIP14	P3	P	
74	FIP13	P2	P	
75	FIP12	P1	P	
76	FIP11	1G	P	FL grid
77	FIP10	2G	P	
78	FIP9	3G	P	
79	FIP8	4G	P	
80	FIP7	5G	P	

Note)
I : Input
A/D : Analog Input
O : Cmos Output
N : Nch Open Drain Output
P : Pch Open Drain Output

■ PDG108A (IC3951 : ADDON DISPLAY ASSY)
(Except XR−P340M and XR−P340)

● System Control Micro-computer

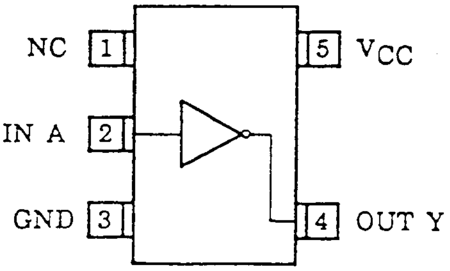
● Pin Function

No.	Name	Function	I/O	Description
1	PE3/INT3	NO USE	–	
2	PE4/RMC	RMC IN	I	Remote control signal input
3	PE5	NO USE	–	
4	PE6	PRO. LOGI	O	Pro-logic ON output
5	PE7/T0	NO USE	–	
6	PB0			
7	PB1/CS0			
8	PB2/SCK0			
9	PB3/SI0			
10	PB4/SO0	9154 CLK	O	9154 CLK output
11	PB5/SCK1	9154 STB	O	9154 STB output
12	PB6/SI1	9154 DATA	O	9154 DATA output
13	PB7/SO1	NO USE	–	
14	PC0/KR0	KEY IN0	I	Key scan, Key return signal input
15	PC1/KR1	KEY IN1		
16	PC2/KR2	NO USE	–	
17	PC3/KR3			
18	PC4/KR4			
19	PC5/KR5			
20	PC6/KR6			
21	PC7/KR7			
22	PA0/AN0	LEVEL L IN	I	A/D input for level meter (Lch)
23	PA1/AN1	LEVEL R IN	I	A/D input for level meter (Rch)
24	PA2/AN2	Destination	I	Prologic/$\overline{\text{Dolby surround}}$ changeover
25	PA3/AN3	SURROUND SEL	O	$\overline{\text{DOLBY}}$/THROUGH changeover output for FRONT & REAR signals.
26	PA4/AN4	F MUTE	O	Front mute output
27	PA5/AN5	NO USE	–	
28	PA6/AN6			
29	PA7/AN7			
30	RST	–	–	Reset signal input
31	EXTAL		–	Connected to ceramic oscillator (8MHz).
32	XTAL			
33	VSS	VSS	–	GND
34	PD0/S0	S MUTE	O	Surround mute output
35	PD1/S1	C MUTE	O	Center mute output
36	PD2/S2	C MODE2	O	Center mode 2 output
37	PD3/S3	C MODE1	O	Center mode 1 output
38	PD4/S4	N MODE2	O	Noise mode 2 output
39	PD5/S5	N MODE1	O	Noise mode 1 output
40	PD6/S6	N CH SEL2	O	Noise channel select 2 output
41	PD7/S7	N CH SEL1	O	Noise channel select 1 output
42	PF0/S8	FL ON	O	FL ON output
43	PF1/S9	NO USE	–	
44	PF2/S10			
45	PF3/S11			
46	PF4/S12			
47	PF5/S13	S1	O	FL control segment output
48	PF6/S14	S2		
49	PF7/S15	S3		
50	S16	S4		
51	S17	S5		
52	S18	S6/KO2	O	FL control segment/Key scan strobe output
53	S19	S7/KO1		
54	S20	S8/KO0		

No.	Name	Function	I/O	Description
55	T15/S21	S9	O	FL control segment output
56	T14/S22	S10		
57	T13/S23	S11		
58	T12/S24	S12		
59	T11/S25	S13		
60	T10/S26	S14		
61	T9/S27	S15		
62	T8/S28	S16		
63	T7	NO USE	–	
64	T6			
65	T5			
66	T4			
67	T3			
68	T2	G3	O	FL control timing output
69	T1	G2		
70	T0	G1		
71	VFDP	VFDP	–	Offset voltage (–30V) for FL control.
72	VDD	VDD	–	+5V Power Supply
73	NC	VDD	–	Connected to VDD.
74	PG0	DOLBY OFF	I	DOLBY NR OFF input
75	PG1	NO USE	–	
76	PG2			
77	PG3			
78	PE0/INT0	POWER ON	I	Power ON input
79	PE1/INT1	Destination	P	Domestic/foreign changeover
80	PE2/INT2	NO USE	–	

TC7S04F (IC8402 : AF CD ASSY)

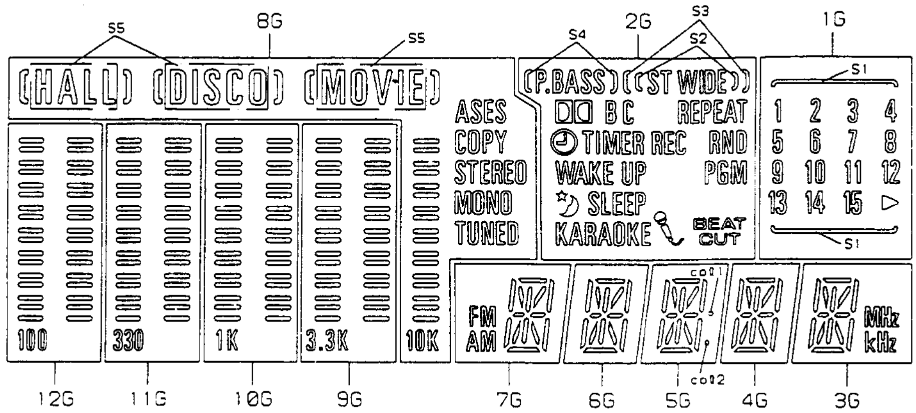
- **Inverter**
- Pin Assignment (Top View)

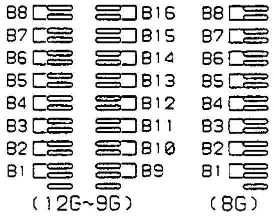


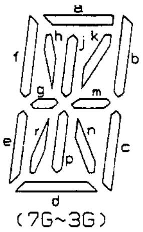
■ AAV7002 (V1701 : DISPLAY ASSY)

● FL Tube

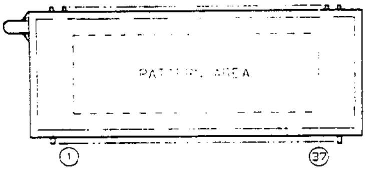
● Grid Assignment


S5
8G
S5
S4
2G
S3
S2
1G
S1
(HALL) (DISCO) (MOVIE)
(P.BASS) (ST WIDE)
ASES
COPY
STEREO
MONO
TUNED
DD BC
REPEAT
TIMER REC
RND
WAKE UP
PGM
SLEEP
KARAOKE
BEAT CUT
1 2 3 4
5 6 7 8
9 10 11 12
13 14 15 ▷
100
330
1K
3.3K
10K
FM
AM
MHz
kHz
col1
col2
12G
11G
10G
9G
7G
6G
5G
4G
3G


B8
B7
B6
B5
B4
B3
B2
B1
B16
B15
B14
B13
B12
B11
B10
B9
(12G~9G)
(8G)


a
f
h
j
k
b
g
m
e
r
p
n
c
d
(7G~3G)

● Pin Assignment


PATTERN AREA
①
㊲

● Pin Connection

PIN NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
CONNECTION	F1	F1	NP	NP	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	NP	NP	F2	F2

NOTE 1) F1,F2 --- Filament
2) NP ------ No pin
3) DL ------ Datum Line
4) 1G~12G --- Grid

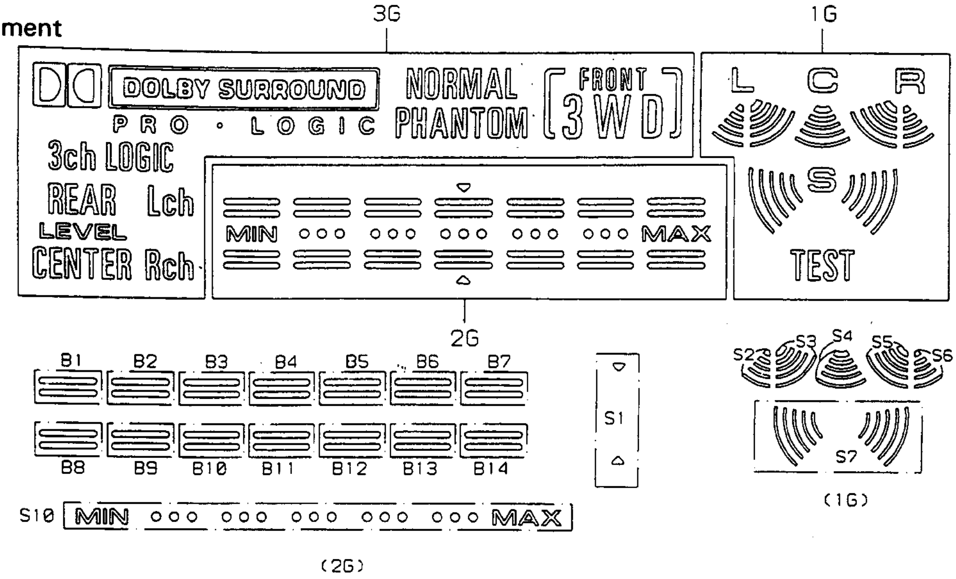
● Anode Connection

	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	B1	B1	B1	B1	B1	AM	–	col2	–	kHz	KARAOKE	14
P2	B2	B2	B2	B2	B2	n	n	n	n	n	PGM	▷
P3	B3	B3	B3	B3	B3	e	e	e	e	e	RND	10
P4	B4	B4	B4	B4	B4	g	g	g	g	g	TIMER	12
P5	B5	B5	B5	B5	B5	b	b	b	b	b	C	6
P6	B6	B6	B6	B6	B6	k	k	k	k	k	DD	8
P7	B7	B7	B7	B7	B7	j	j	j	j	j	S3	2
P8	B8	B8	B8	B8	B8	a	a	a	a	a	P. BASS STWIDE	4
P9	B9	B9	B9	B9	[(HALL)]	d	d	d	d	d	BEAT CUT	13
P10	B10	B10	B10	B10	[(DISCO)]	p	p	p	p	p	SLEEP	15
P11	B11	B11	B11	B11	[(MOVIE)]	r	r	r	r	r	WAKE UP	9
P12	B12	B12	B12	B12	TUNED	c	c	c	c	c	REC	11
P13	B13	B13	B13	B13	MONO	m	m	m	m	m	REPEAT	5
P14	B14	B14	B14	B14	STEREO	f	f	f	f	f	B	7
P15	B15	B15	B15	B15	COPY	h	h	h	h	h	S2	1
P16	B16	B16	B16	B16	ASES	FM	–	col1	–	MHz	S4	3
P17	100	330	1K	3.3K	10K S5	–	–	–	–	–	–	S1

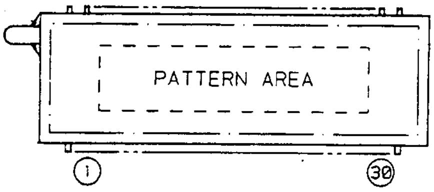
■ AAV7001 (V3951 : ADDON DISPLAY ASSY) (Except XR−P340M and XR−P340)

● FL Tube

● Grid Assignment


3G
1G
DOLBY SURROUND
PRO · LOGIC
NORMAL
PHANTOM
FRONT
3WD
L
C
R
3ch LOGIC
REAR
Lch
LEVEL
CENTER
Rch
MIN
MAX
S
TEST
2G
B1
B2
B3
B4
B5
B6
B7
B8
B9
B10
B11
B12
B13
B14
S1
S2
S3
S4
S5
S6
S7
(1G)
S10
(2G)

● Pin Assignment


PATTERN AREA
①
㉚

● Pin Connection

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
CONNECTION	F1	F1	NP	1G	2G	3G	P16	P15	P14	P13	P12	P11	P10	P9	P8	P7	P6	P5	P4	P3	P2	P1	NX	NX	NX	NX	NX	NP	F2	F2

NOTE
1) F1, F2 – – – Filament
2) NP – – – – – No pin
3) NX – – – – – No extend pin
4) DL – – – – – Datum Line
5) 1G − 3G – – Grid

● Anode Connection

	3G	2G	1G
P1	DOLBY SURROUND	S10	L R
P2	PRO · LOGIC	B1	C
P3	3ch LOGIC	B2	S
P4	REAR	B3	TEST
P5	LEVEL	B4	S2
P6	CENTER	B5	S3
P7	Lch Rch	B6	S4
P8	NORMAL	B7	S5
P9	PHANTOM	B8	S6
P10	FRONT 3WD	B9	S7
P11	-	B10	-
P12	-	B11	-
P13	-	B12	-
P14	-	B13	-
P15	-	B14	-
P16	-	S1	-

1.7 ADJUSTMENTS

1. TUNER SECTION

■ FM Tuner Section

- Set the mode selector to FM BAND.
- Connect the wiring as shown in Fig. 1−1.

Step No.	Adjustment Title	FM SG (1kHz, ±75kHz dev.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (MHz)	Level (dBμV)			
1	Center Adjustment	98 Non modulation	80 or more	—	L6207	Adjust so that the DC voltage between Pin 4 and Pin 28 of IC6201 becomes 0V±50mV.
2	Front End Sencitivity	98	10−30	98MHz	L6102 T6101	Adjust so that the DC voltage of the Pin12 of IC6201 (S-meter) becomes at maximum level.
3	TUNED IND. Lighting Level	98	15±2	98MHz	VR6201	Adjust so that the indicators of TUNED IND. start to light up.

Notes:

- *Before adjusting, make sure there is no gap between L6101 and L6102. If there is a gap between them, bring them into contact with each other first, and then make adjustments.*
- *Make indicator adjustments in order of AM → FM.*

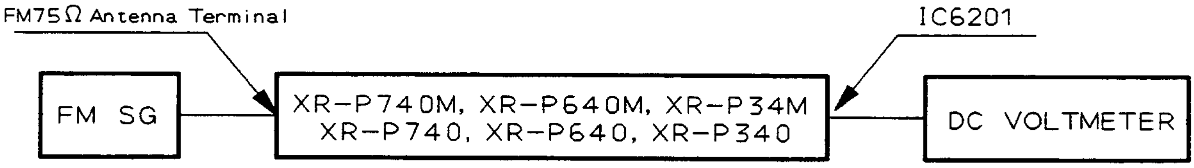

FM75Ω Antenna Terminal
FM SG
XR−P740M, XR−P640M, XR−P34M
XR−P740, XR−P640, XR−P340
IC6201
DC VOLTMETER

Fig. 1−1 FM Adjustment Connection Diagram

■ AM Tuner Section

- Set the mode selector to AM BAND.
- Connect the wiring as shown in Fig. 1−2.

Step No.	Adjustment Title	AM SG (400Hz, 30% Mod.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (kHz)	Level (dBμV/m)			
1	TUNED IND. Lighting Level	999	47±2	999kHz	VR6202	Adjust so that the indicators of TUNED IND. start to light up.

Note:

- *When SD and YPW type is used, set the AM frequency step to 10kHz.*

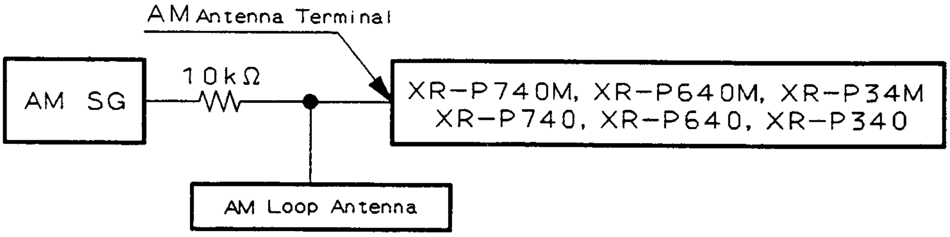

AM Antenna Terminal
AM SG
10kΩ
XR−P740M, XR−P640M, XR−P34M
XR−P740, XR−P640, XR−P340
AM Loop Antenna

Fig. 1−2 AM (MW) Adjustment Connection Diagram

FM/AM TUNER MODULE

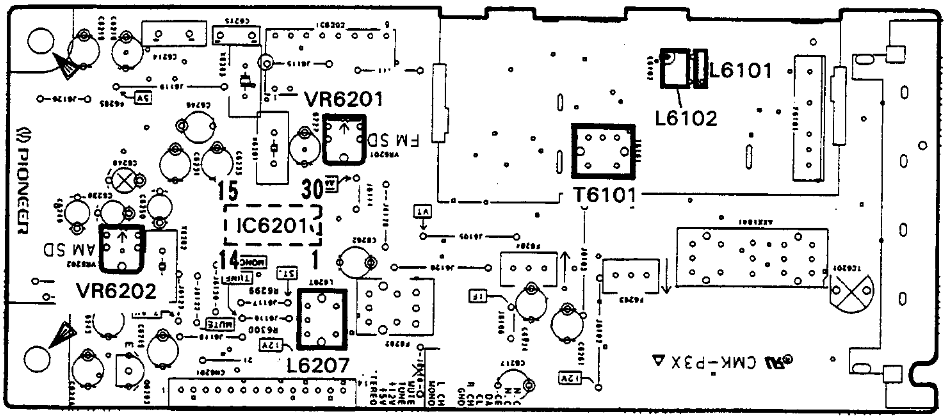


Fig. 1−3 Adjustment Points

2. POWER AMP MODULE SECTION (Refer to Fig. 2−1.)

1. Handling Precautions

- Since the heat sink and transistor metallic parts are connected to the Front Amp output, make sure they do not contact the GND (chassis) or other circuits.
- Since there is residual high voltage in the Power Amp Module Assy ±B1 (FRONT ASSY FOR 100W) and ±B2 (REAR, PWR, PRTEC ASSY) even when the power is OFF, caution should be exercised. (If necessary, the voltage should be discharged).
- When handling the Power Amp Module Assy, make sure you do not touch the fan motor blade.

2. Adjustment and Confirmation of Idle Current

- Basically, the idle current needs to be confirmed when replacing a power transistor, driver transistor, or bias transistor, or when the entire split board Assy of the Power Amp Module Assy has been replaced.
- Make sure the heat sink has cooled sufficiently before measuring the idle current. (Temperature should be the same as room temperature; 25°C is ideal, if possible.)
- Idle current stipulated value: 3−50mA.

■ Front Amp Side (FRONT ASSY FOR 100W)

Step	Measurement	Item	Remarks
1	Lch side	Short both sides of C7123 and C7124 on the Rear Amp side.	Do not operate the Rear Amp side.
2		Insert a resistor (0.22Ω, 3W or more) in series in the connector CN7502 +B1 (or −B1) line (terminal No. 5 or 6). (Refer to Fig. 2−2.)	For measuring voltage at both sides of resistor
3		Short both sides of C7524.	Do not operate Rch side.
4		Turn the power ON, wait 6 seconds, and then measure the resistance voltage in Step 2.	Lch Idle current I=V/0.22 (Ω)
5	Rch side	● Same as Steps 1 and 2 above. ● Short both sides of C7523.	Do not operate Lch side.
6		Turn the power ON under the above conditions, and after 6 seconds measure the resistance voltage in Step 2.	
7	——	If the measured idle current is greater than 50mA, perform the following procedure.	
8	Lch side	Short between the Point A pattern in Fig. 2−3 using solder.	Connect R7517 to R7515 in a parallel circuit.
9	Rch side	Short between the Point B pattern in Fig. 2−3 using solder.	Connect R7518 to R7516 in a parallel circuit.
10	——	After performing Steps 8 and 9, remeasure the idle current and confirm that it is below 50mA.	

NOTE:
If the idle current is below 3mA, support a resistor (33kΩ) between the emitter and the Q7501 (Lch) and Q7502 (Rch) bias transistor base, and confirm that the idle current is within 3−50mA.

■ Rear Amp Side (REAR, PWR, PRTEC ASSY)

Step	Measurement	Item	Remarks
1	Center amp side	Short both sides of C7523 and C7524 on the Front Amp side.	Do not operate the Front Amp side.
2		Insert a resistor (0.22Ω, 2W or more) in series in the connector CN7102 +B2 (or −B2) line (terminal No. 5 or 6). (Refer to Fig. 2−4.)	For measuring voltage at both sides of resistor
3		Short both sides of C7124 on the Surround Amp side.	Do not operate the Surround Amp.
4		Turn the power ON, wait 6 seconds, and then measure the resistance voltage in Step 2.	Idle current: I = V/0.22 (Ω)
5	Surround amp side	● Same as Steps 1 and 2 above. ● Short both sides of C7123 on Surround Amp side.	Do not operate Surround Amp.
6		Turn the power ON under the conditions in Steps 1 and 2, and after 6 seconds measure the resistance voltage in Step 2.	
7	——	If the measured idle current is greater than 50mA, perform the following procedure.	
8	Center amp side	Short between the Point C pattern in Fig. 2−5 using solder.	Connect R7117 to R7115 in a parallel circuit.
9	Surround amp side	Short between the Point D pattern in Fig. 2−5 using solder.	Connect R7118 to R7116 in a parallel circuit.
10	——	After performing Steps 8 and 9, remeasure the idle current and confirm that it is below 50mA.	

NOTE:
If the idle current is below 3mA, support a resistor (15kΩ) between the emitter and the Q7101 (Center-ch) and Q7102 (Surround-ch) base, and confirm that the idle current is within 3−50mA.

3. Adjusting the Operating Temperature Setting of the Fan Motor (VR7701)

This adjustment is necessary when IC7403 (+12V regulator), Q7301 and Q7302 (temperature sensors), or VR7701 has been replaced, or when the entire split board Assy of the Power Amp Module Assy has been replaced.

■ Adjustment-Related Cautions

- Make sure the heat sink has sufficiently cooled (is the same as room temperature Ta.)
- Once the power has been turned ON, make measurements and adjustments as quickly as possible. (If too much time is taken, the heat sink temperature will rise, and the measurements will deviate from the Ta measurement point.)

■ Adjustment

1. Connect a voltmeter between TEMP and TP (or between IC7702 terminals No.3 and 2). (Refer to Figs. 2−3 and 2−6.)
2. Determine the fan motor operating temperature setting by means of the following formula. (Tolerance is within ±30mV.)
   Formula: (85°C − Ta) × 19 (mV)
   Ta: ambient temperature (°C)
3. Adjust VR7701 so that the voltage between TEMP and TP is the value obtained from the above formula.

For example:
when the room temperature is 25°C,
set value = (85 − 25) × 19 (mV)
= 1140mV (tolerance within ±30mV).

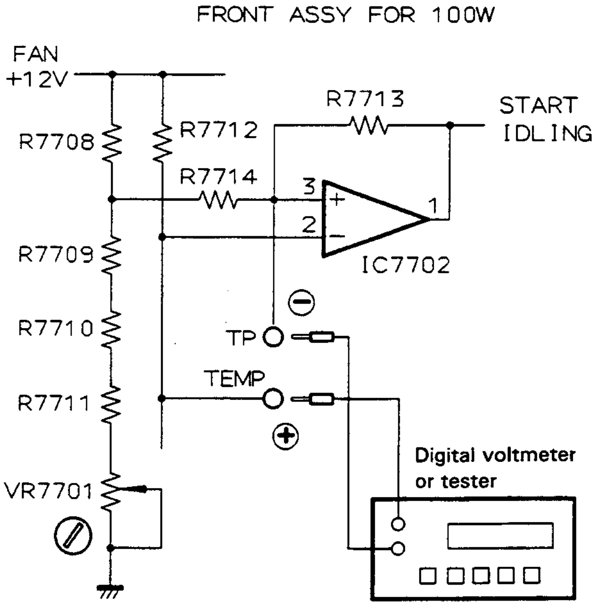


Fig. 2−6 Adjustment of Operating Temperature Setting of Fan Motor

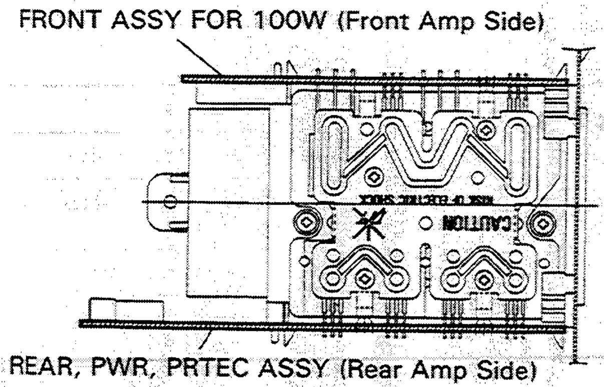

FRONT ASSY FOR 100W (Front Amp Side)
RISK OF ELECTRIC SHOCK
CAUTION
REAR, PWR, PRTEC ASSY (Rear Amp Side)

Fig. 2−1 Power Amp Module
(POWER MOD. F100+R20)

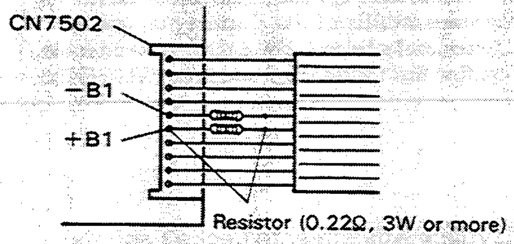

CN7502
−B1
+B1
Resistor (0.22Ω, 3W or more)

Fig. 2−2 FRONT ASSY FOR 100W

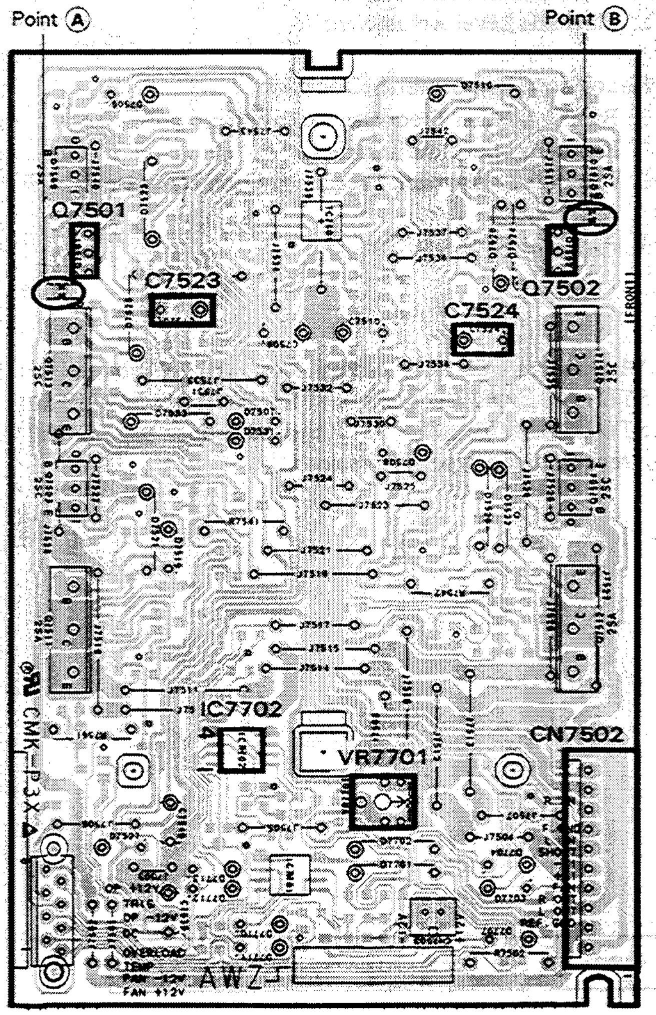

Point Ⓐ
Point Ⓑ
Q7501
C7523
C7524
Q7502
IC7702
VR7701
CN7502
CMK−P3X
AWZ
(FRONT)

Fig. 2−3 FRONT ASSY FOR 100W
(This diagram is viewed from the foil side)

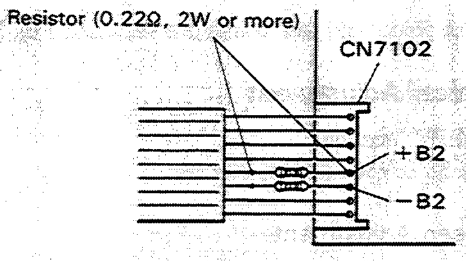

Resistor (0.22Ω, 2W or more)
CN7102
+B2
−B2

Fig. 2−4 REAR, PWR, PRTEC ASSY

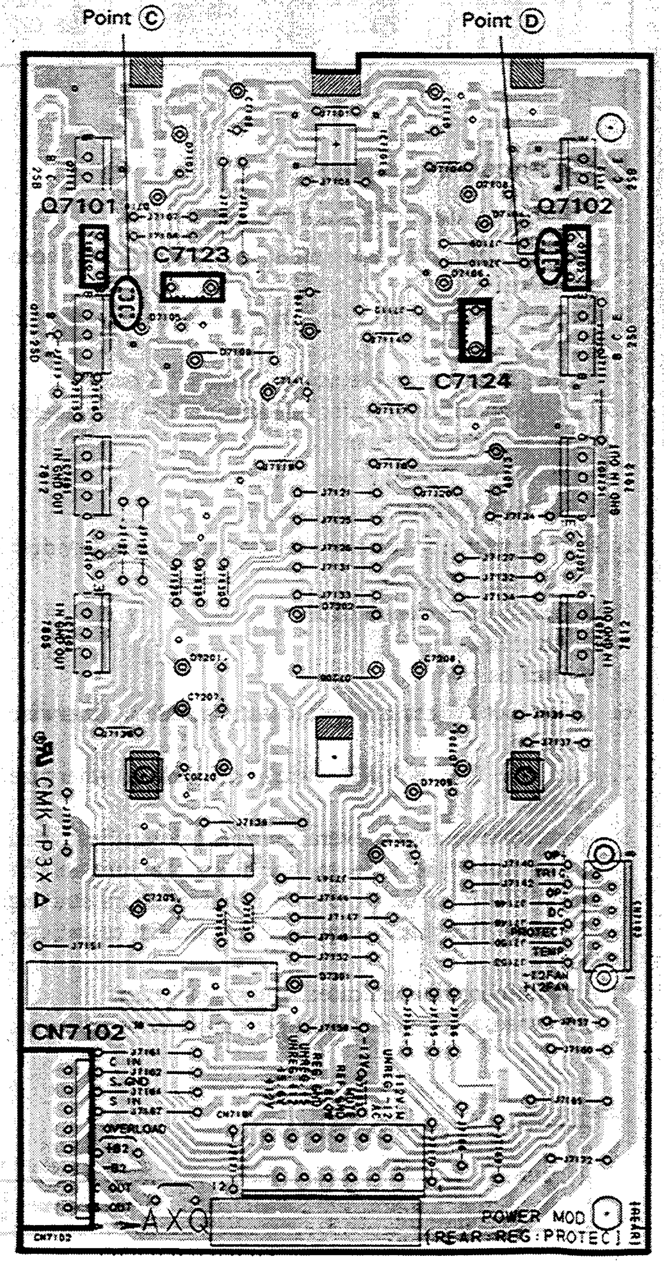

Point Ⓒ
Point Ⓓ
Q7101
C7123
Q7102
C7124
CMK−P3X
CN7102
OVERLOAD
AXQ
POWER MOD
(REAR)
(REAR·REG·PROTEC)

Fig. 2−5 REAR, PWR, PRTEC ASSY
(This diagram is viewed from the foil side)

3. CASSETTE DECK SECTION

- Adjustment points and test points are shown in Fig. 3−2 and Fig. 3−4.

■ Mechanical Adjustment

- Set the TAPE function.
- Test tape: STD−301 (3kHz, 30min).

1. Tape Speed Adjustment

No.	Mode	Test Tape	Adjusting Points	Measurement Points	Adjustment Procedure	Remarks
1	PLAY	STD−301 (Playback: 3kHz)	DECK Unit VR4111	TAPE TEST POINT (Rch) (AF CD Assy)	Press the PLAY SW and adjust so that the reading becomes 3010Hz±10Hz. Confirm that wow & flutter level is below 0.2% (in the reverse direction, confirm that the reading is within 3010Hz±60Hz).	

■ Electrical Adjustment

Check the following before starting.

1. Confirm that the tape speed adjustment has been completed.
2. Clean the heads and demagnetize them using a head eraser.
3. Set the measurement level to 0 dBV = 1 Vrms.
4. Use the specified tape for adjustment. Use the labeled (A) side of the test tape.
   STD−331E: For playback adjustment
   STD−631: Normal blank tape
5. Provide yourself with the following measuring devides:
   - AC millivoltmeter
   - Low-frequency oscillator
   - Attenuator
   - Oscilloscope
6. Adjust both right and left channels unless otherwise specified.
7. Turn the DOLBY NR switch off unless otherwize specified.
8. Warm up the unit for several minutes before adjustment. In particular, be sure to warm up the unit in the REC/PLAY mode for 3 to 5 minutes before starting recording/playback frequency characteristics adjustment.
9. Always follow the indicated adjustment order.
   Otherwise, a complete adjustment may not be achieved.

Playback Adjustment (Decks I and II)

1. Head Azimuth Adjustment
2. Playback Level Adjustment

Recording Adjustment (Deck II)

1. Bias Oscillation Frequency Adjustment
2. Recording Level Adjustment.
3. Recording/playback Frequency Characteristics Adjustment
4. ALC Operation Check

**As the reference recording level is 250nwb/m for STD−331E, the recording level will be higher by 4 dB for STD−331B (160nwb/m). When adjusting, pay carefull attention to the type of tape used.*

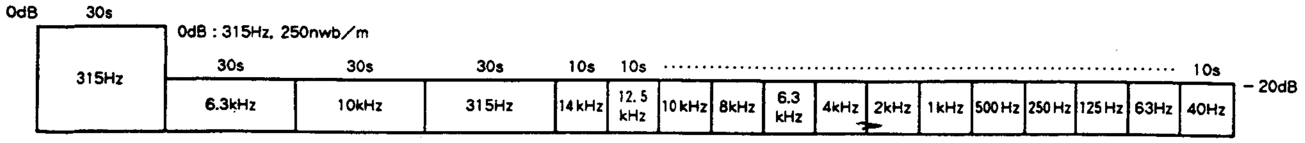


Fig. 3−1 STD−331E Test Tape

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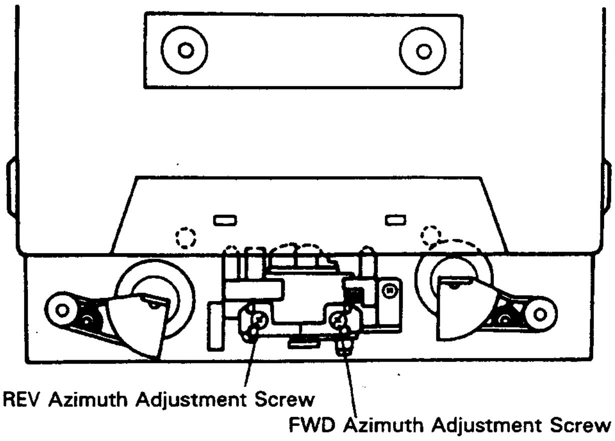
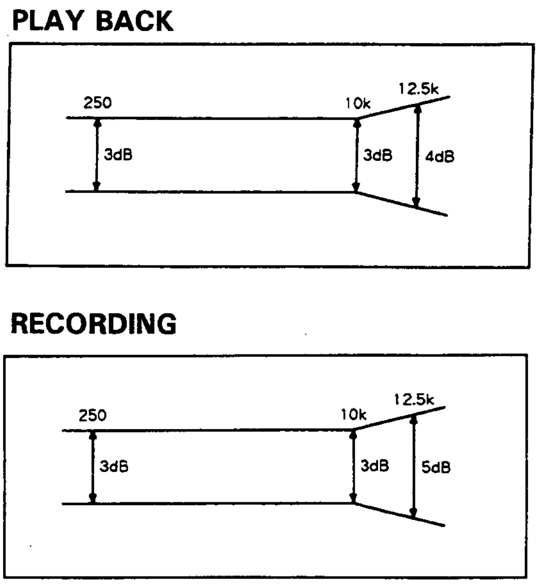


Fig. 3−2 Head Azimuth Adjustment


PLAY BACK

RECORDING

Fig. 3−3 Frequency Characteristics

● Playback Adjustment

1. Head Azimuth Adjustment

- This unit is equipped with auto tape selector.
- Do not switch between forward and reverse operation with the screwdriver inserted.

Step	Tape Selector (AUTO)	Mode	Input Signal/ Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	NORMAL	PLAY	STD−331E test tape (Playback: 10kHz, −10dB)	Deck I	Head azimuth adjustment screw (Fig. 3−2)	TAPE TEST POINT (L, Rch) (AF CD Assy)	Max. playback signal level	After adjustment, apply lock paint to the head azimuth adjustment screw.
				Deck II				

2. Playback Level Adjustment

- Since this adjustment determines playback Dolby NR level, perform it carefully.

Step	Tape Selector (AUTO)	Mode	Input Signal/ Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	NORMAL	PLAY	STD−331E teat tape (Playback: 315Hz, 0dB)	Deck I	VR4201 (Lch) VR4202 (Rch)	TAPE TEST POINT (L, Rch) (AF CD Assy)	−1.2 dBV	
				Deck II	VR4203 (Lch) VR4204 (Rch)			

● Recording Adjustment

1. Bias Oscillation Frequency Adjustment

Step	Tape Selector (AUTO)	Mode	Input Signal/Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	NORMAL	REC	Load the STD−631 test tape and set the recording mode.	Deck I	—	—	Oscillation frequency to be 105.0kHz ±2kHz.	When the power is turned ON while the BAND button is depressed, the frequency will decrease 2−3 kHz.
				Deck II	—	Between Ⓐ point in Fig. 3−4 and GND.		

2. Recording Level Adjustment

Step	Tape Selector (AUTO)	Mode	Input Signal/Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	NORMAL	REC	Input a 315Hz signal to the VIDEO/AUX IN terminal and set the input selector to VIDEO.	Deck I	Input signal level	TAPE TEST POINT (L, Rch) (AF CD Assy)	−5.2 dBV	
				Deck II				
2	NORMAL	REC/PLAY	STD−631 test tape and record/playback the 315Hz signal.	Deck I	—	TAPE TEST POINT (L, Rch) (AF CD Assy)	Repeat recording, playback and adjustment until playback level of the 315Hz signal becomes −5.2dBV.	
				Deck II	VR4301 (Lch) VR4302 (Rch)			

3. Recording/playback Frequency Characteristics Adjustment

- Since this adjustment affects recording bias, prevent distortion from increasing due to underbias.

Step	Tape Selector (AUTO)	Mode	Input Signal/Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	NORMAL	REC	Input a 315Hz signal to the VIDEO/AUX IN terminal and set the input selector to VIDEO.	Deck I	—	TAPE TEST POINT (L, Rch) (AF CD Assy)	−25.2 dBV	
				Deck II	Input signal level			
2	NORMAL	REC/PLAY	Load the STD−631 test tape and record/playback the 315Hz and 10kHz signals. (see the Note below)	Deck I	—	TAPE TEST POINT (L, Rch) (AF CD Assy)	Repeat adjustment until playback level of the 10kHz signal is within 0±0.5dB from that of the 315Hz signal.	
				Deck II	VR4351 (Lch) VR4352 (Rch)			

Note: Set to the same level used for the 315Hz input signal at step 1.

4. ALC Operation Check

Step	Tape Selector (AUTO)	Mode	Input Signal/Test Tape	Adjusting Points	Measurement Points	Adjustment Value	Remarks
1	NORMAL	REC • PAUSE	Input a 315Hz signal to the VIDEO/AUX IN terminal and set the input selector to VIDEO.	Input signal level	TAPE TEST POINT (L, Rch) (AF CD Assy)	−5.2 dBV	
2				Set to a level +10dB above the input level at step 1.		−2.2±2.5dBV	

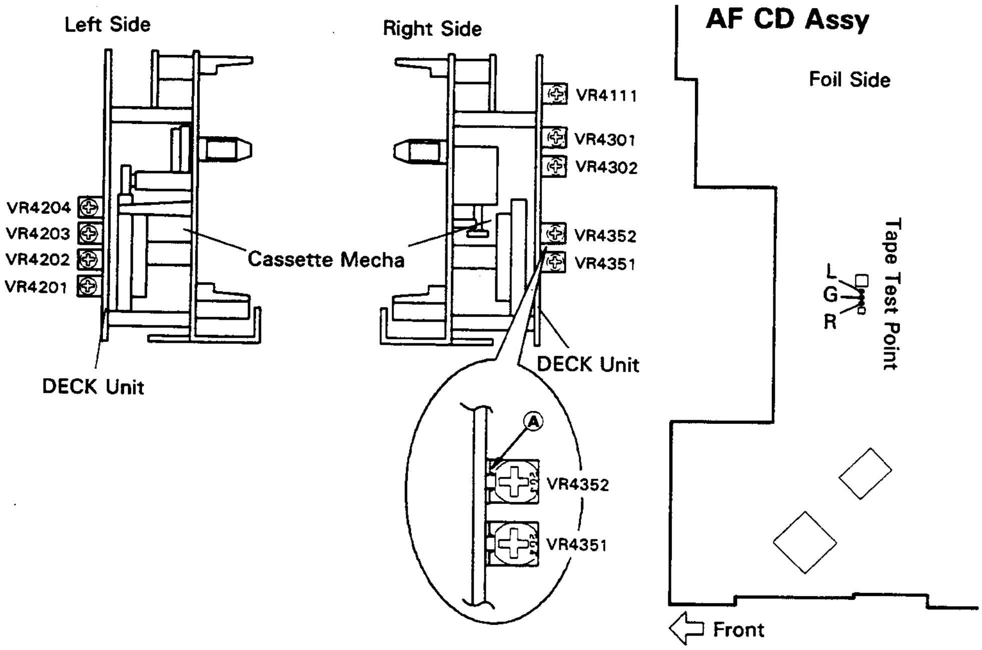
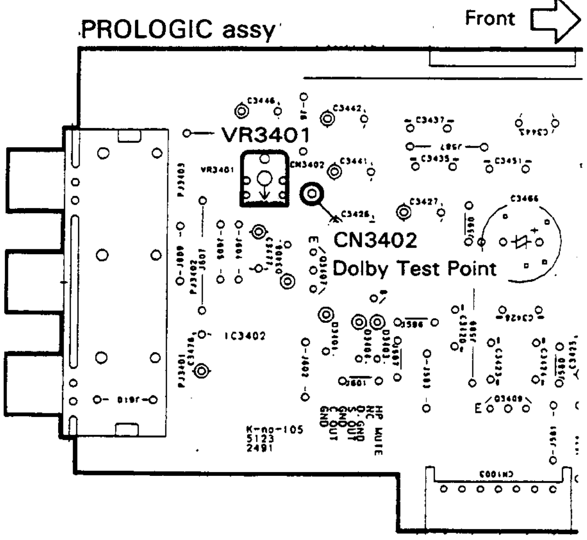

Left Side
Right Side
AF CD Assy
Foil Side
VR4111
VR4301
VR4302
VR4204
VR4203
VR4202
VR4201
Cassette Mecha
VR4352
VR4351
DECK Unit
DECK Unit
Ⓐ
VR4352
VR4351
L
G
R
Tape Test Point
Front

Fig. 3−4 Adjusting Points and Measurement Points

4. DOLBY PRO-LOGIC ADJUSTMENT

1. Turn FUNCTION to VIDEO, MODE to PRO-LOGIC, and CENTER MODE to NORMAL.
2. Input a 1kHz sine wave (253mVrms) to the Video Terminal (L/R). (But the input signal for R should be 180° inverse of the input signal for L.)
3. Adjust VR3401 so that the Dolby Test Point (CN3402) is 300mVrms.

NOTE:
Wait at least 2 minutes after the power has been turned ON before making adjustments.


PROLOGIC assy
Front
VR3401
CN3402
Dolby Test Point

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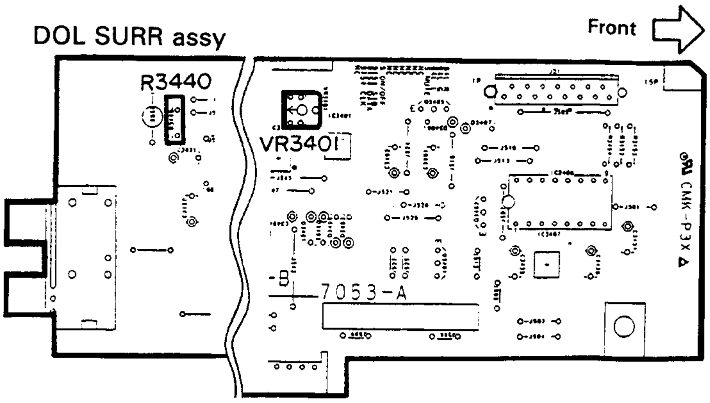
5. DOLBY SURROUND ADJUSTMENT

1. Turn FUNCTION to VIDEO and SURROUND to ON.
2. Input a 1kHz sine wave (260mVrms) to the Video Terminal (L/R). (But the input signal for R should be 180° inverse of the input signal for L.)
3. Adjust VR3401 so that the Dolby Test Point (R3440) is 71mVrms.

NOTE:
Wait at least 2 minutes after the power has been turned ON before making adjustments.


DOL SURR assy
Front
R3440
VR3401
7053-A

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6. CD SECTION (FOR CD MULTI AND CD SINGLE)

■ Adjustment Methods

If a disc player is adjusted incorrectly or inadequately, it may malfunction or not work at all even though there is nothing at all wrong with the pickup or the circuitry. Adjust correctly following the adjustment procedure.

● Adjustment Items/Verification Items and Order

If the specified values cannot be obtained or no adjustment is possible by performing the verifications or adjustments described in steps 1–4, the pickup block may be defective.

Step	Item	Test Point	Adjustment Location
1	Focus offset verification	TP1, Pin6 (FOER)	None
2	Tracking error balance verification	TP1, Pin2 (TRER)	None
3	Pickup radial/tangential direction tilt adjustment	TP1, Pin1 (RF)	Radial tilt adjustment screw, Tangential tilt adjustment screw
4	RF level verification	TP1, Pin1 (RF)	None
5	Focus servo loop gain adjustment	TP1, Pin5 (FOIN) TP1, Pin6 (FOER)	VR8152 (FCS GAN)
6	Tracking servo loop gain adjustment	TP1, Pin3 (TRIN) TP1, Pin2 (TRER)	VR8151 (TRK GAN)

● Abbreviation Table

FOER : Focus Error
TRER : Tracking Error
FCS GAN : Focus Gain
TRK GAN : Tracking Gain
FOIN : Focus In
TRIN : Tracking In

● Measuring Instruments and Tools

1. Dual trace oscilloscope (10 : 1 probe)
2. Low-frequency oscillator
3. Test disc (YEDS–7)
4. Low pass filter (39kΩ + 0.001μF)
5. Resistor (100kΩ)
6. 8cm disc (With at least about 20 minutes of recording)
7. Ball point hexagon wrench (GGK1002)
8. Standard tools

● Test Point and Adjustment Variable Resistor Positions

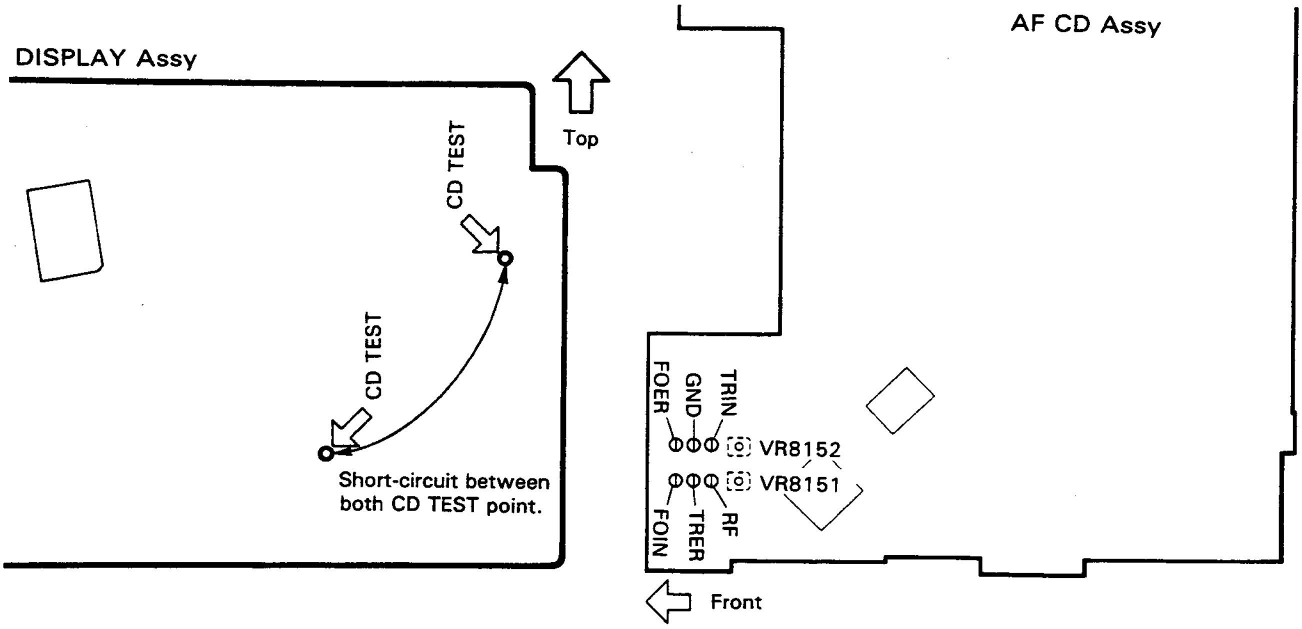

DISPLAY Assy
AF CD Assy
Top
CD TEST
CD TEST
Short-circuit between
both CD TEST point.
FOER
GND
TRIN
VR8152
VR8151
FOIN
TRER
RF
Front

Fig. 1 Adjustment Location

● Notes

1. Use a 10 : 1 probe for the oscilloscope.
2. All the knob positions (settings) for the oscilloscope in the adjustment procedures are for when a 10 : 1 probe is used.

● Test Mode

These models have a test mode so that the adjustment and checks required for service can be carried out easily. When these models are in test mode, the keys on the front panel work differently from normal. Adjustments and checks can be carried out by operating these keys with the correct procedure. For these models, all adjustments are carried out in test mode.

[Setting these models to test mode]

How to set this model into test mode.
1. When the Power switch to activated, set the FUNCTION button to CD.
2. Short-circuit between both CD TEST points. (See Fig. 1)

When the test mode is set correctly, the display is different from what it usually is when the power is turned on. If the display is still the same as usual, test mode has not been set correctly, so repeat Steps 1−2.

[Release from test mode]

Here is the procedure for releasing the test mode:

1. Press the STOP key and stop all operations.
2. Turn off the power switch on the front panel.

[Operations of the keys in test mode]

Code	Key Name	Function in Test Mode	Explanation
	DOLBY NR	Focus servo close	The laser diode is lit up and the focus actuator is lifted up, then lowered slowly and the focus servo is closed at the point where the objective lens is focused on the disc. With the player in this state, if you lightly rotate the stopped disc by hand, you can hear the sound the focus servo. If you can hear this sound, the focus servo is operating correctly. If you press this key with no disc mounted, the laser diode lights up, the focus actuator is pulled up, then the actuator is lowered and raised three times and returned to its original position.
▷/❚❚	PLAY/PAUSE	Spindle servo ON	Starts the spindle motor in the clockwise direction and when the disc rotation reaches the prescribed speed (about 500rpm at the inner periphery), sets the spindle servo in a closed loop. Be careful. Pressing this key when there is no disc mounted makes the spindle motor run at the maximum speed. If the focus servo does not go correctly into a closed loop or the laser light shines on the mirror section at the outermost periphery of the disc, the same symptom is occurred.
		Tracking servo close/open	Pressing this key when the focus servo and spindle servo are operating correctly in closed loops puts the tracking servo into a closed loop, displays the track number being played back and the elapsed time on the front panel, and outputs the playback signal. If the elapsed time is not displayed or not counted correctly or the audio is not played back correctly, it may be that the laser is shining on the section with no sound recorded at the outer edge of the disc, that something is out of adjustment, or that there is some other problem. This key is a toggle key and open/close the tracking servo alternately. This key has no effect if no disc is mounted.

Code	Key Name	Function in Test Mode	Explanation
◁◁ • ▯◁◁	MANUAL/TRACK SEARCH REV	Carriage reverse (inwards)	Moves the pickup position toward the inner diameter of the disc. When this key is pressed with the tracking servo in a closed loop, the tracking servo automatically goes into an open loop. Since the motor does not automatically stop at the mechanical end point in test mode, be careful with this operation.
▷▷ • ▷▷▯	MANUAL/TRACK SEARCH FWD	Carriage forward (outwards)	Moves the pickup position toward the outer diameter of the disc. When this key is pressed with the tracking servo in a closed loop, the tracking servo automatically goes into an open loop. Since the motor does not automatically stop at the mechanical end point in test mode, be careful with this operation.
□	STOP	Stop	Initializes and the disc rotation stops. The pickup and disc remain where they are when this key is pressed.
⏏	EJECT	CD magazine eject (For CD Multi)	Stores Disc 1 in the CD magazine, then ejects the CD magazine. However, even though the CD magazine is ejected, the pickup does not return to the park position. Even if the CD magazine is mounted again, the pickup remains where it is.
⏏	OPEN/CLOSE	Disc tray open/close (For CD Single)	Open/close the disc tray. This key is a toggle key and open/close tray altenately. Pressing this key when the disc is turning stops the disc, then opens the tray. This key operation does not affect the position of the pickup.

Note: When inserting the magazine, disc 1 of the magazine is loaded automatically.

[How to playback a disc in test mode]

In test mode, since the servos operate independently, playing back a disc requires that you operate the keys in the correct order to close the servos.
Here is the key operation sequence for playing back a disc in test mode.

DOLBY NR — Lights up the laser diode and closes the focus servo.
⇩
▷/▯▯ — Starts the spindle motor and closes the spindle servo.
⇩
▷/▯▯ — Closes the tracking servo.

Wait at least 2−3 seconds between each of these operations.

Focus Offset Verification

● Objective	Verify the DC offset for the focus error amp.		
● Symptom when out of adjustment	The model does not focus in and the RF signal is dirty.		
● Measurement Instrument Connections	Connect the oscilloscope to TP1, Pin6 (FOER) [Settings] 5mV/division 10ms/division DC mode	● Player State ● Adjustment Location ● Disc	Test mode, stopped (just the Power switch on) None None needed

[Procedure]
Verify the DC voltage at TP1, Pin6 (FOER) is 0±50mV.

Note: If the specified values cannot be obtained or no adjustment is possible by performing the verifications or adjustments described in adjustment items 1−4, the pickup block may be defective.

Tracking Error Balance Verification

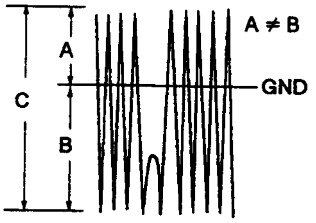
● Objective	To verify that there is no variation in the sensitivity of the tracking photo diode.		
● Symptom when out of adjustment	Play does not start or track search is impossible.		
● Measurement Instrument Connections	Connect the oscilloscope to TP1, Pin2 (TRER). This connection may be via a low pass filter. [Settings] 50mV/division 5ms/division DC mode	● Player State ● Adjustment Location ● Disc	Test mode, focus and spindle servos closed and tracking servo open. None YEDS−7

[Procedure]

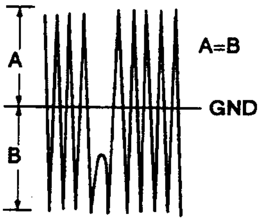
1. Move the pickup to midway across the disc (R=35mm) with the MANUAL/TRACK SEARCH FWD ▷▷ • ▷▷▯ key or REV ▯◁◁ • ◁◁ key.
2. Press the DOLBY NR key, then the PLAY/PAUSE ▷/▯▯ key in that order to close the focus servo then the spindle servo.
3. Line up the bright line (ground) at the center of the oscilloscope screen and put the oscilloscope into DC mode.
4. Supposing that the positive amplitude of the tracking error signal at TP1, pin2 (TRER) is (A) and the negative amplitude is (B), the following expression is satisfied.

When $A \geqq B$, $\frac{A-B}{C} \times \frac{1}{2} \leqq 0.1$

When $A < B$, $\frac{B-A}{C} \times \frac{1}{2} \leqq 0.1$



When there is a DC component



When there is no DC component

■ Pickup Radial／Tangential Tilt Adjustment (For CD Multi)

● Objective	To adjust the angle of the pickup relative to the disc so that the laser beams are shone straight down into the disc for the best read out of the RF signals.		
● Symptom when out of adjustment	Sound broken; some discs can be played but not others.		
● Measurement Instrument Connections	Connect the oscilloscope to TP1, Pin1 (RF). [Settings] 20mV／division 200ns／division AC mode	● Player State ● Adjustment Location ● Disc	Test mode, play Pickup radial tilt adjustment screw and tangential tilt adjustment screw YEDS−7

[Procedure]

1. Press the MANUAL／TRACK SEARCH FWD ▷▷ • ▷▷▯ key or REV ▯◁◁ • ◁◁ key to move the pickup to halfway across the disc (R=35mm).
   Press the DOLBY NR key, the PLAY／PAUSE ▷／▯▯ key twice in that order to close the respective servos and put the player into play mode.
2. First, adjust the radial tilt adjustment screw with a Phillips screwdriver so that the eye pattern (the diamond shape at the center of the RF signal) can be seen the most clearly.
3. Next, adjust the tangential tilt adjustment screw with a Phillips screwdriver so that the eye pattern (the diamond shape at the center of the RF signal) can be seen the most clearly (Fig. 3).
4. Adjust the radial tilt adjustment screw and the tangential tilt adjustment screw again so that the eye pattern can be seen the most clearly. As necessary, adjust the two screws alternately so that the eye pattern can be seen the most clearly.
5. When the adjustment is completed, lock the radial and tangential adjustment screw.

Note: Radial and tangential mean the directions relative to the disc shown in Fig. 2.

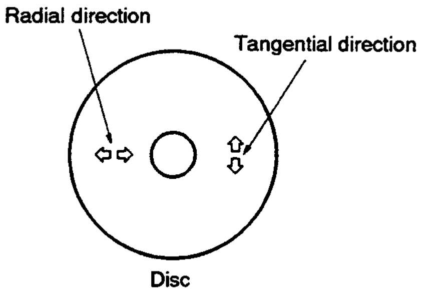
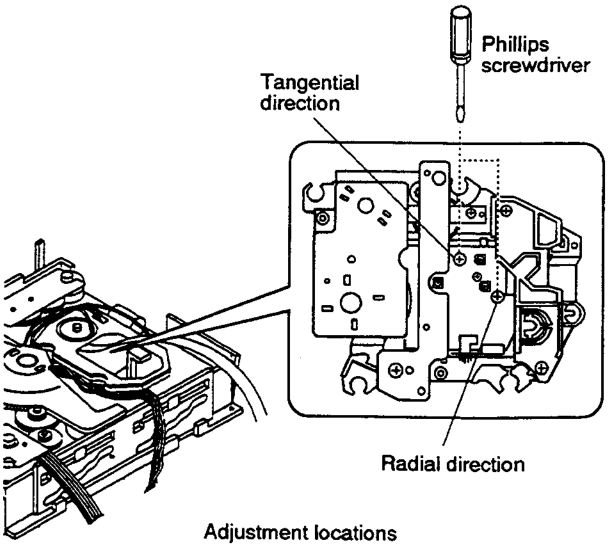


Fig. 2



Adjustment locations

■ Pickup Radial／Tangential Tilt Adjustment (For CD Single)

● Objective	To adjust the angle of the pickup relative to the disc so that the laser beams are shone straight down into the disc for the best read out of the RF signals.
● Symptom when out of adjustment	Sound broken; some discs can be played but not others.

● Measurement Instrument Connections	Connect the oscilloscope to TP1, Pin1 (RF). [Settings] 20mV／division 200ns／division AC mode	● Player State	Test mode, play
		● Adjustment Location	Pickup radial tilt adjustment screw and tangential tilt adjustment screw
		● Disc	8 cm disc [Hewever, those with approx. 20 min of audio signal (music).]

[Procedure]

1. Press the MANUAL／TRACK SEARCH FWD ▷▷ • ▷▷▯ key or REV ▯◁◁ • ◁◁ key to move the pickup to the external circumference of the disc.
   Press the DOLBY NR key, the PLAY／PAUSE ▷／▯▯ key twice in that order to close the respective servos and put the player into play mode.
2. First, adjust the radial tilt adjustment screw with the hexagon wrench (GGK1002) so that the eye pattern (the diamond shape at the center of the RF signal) can be seen the most clearly.
3. Next, adjust the tangential tilt adjustment screw with the hexagon wrench (GGK1002) so that the eye pattern (the diamond shape at the center of the RF signal) can be seen the most clearly (Fig. 3).
   ※ The ball-point type hexagonal wrench is used because the disc will get in the way if a normal hexagonal wrench is used.
4. Adjust the radial tilt adjustment screw and the tangential tilt adjustment screw again so that the eye pattern can be seen the most clearly. As necessary, adjust the two screws alternately so that the eye pattern can be seen the most clearly.
5. When the adjustment is completed, lock the radial and tangential adjustment screw.

Note: Radial and tangential mean the directions relative to the disc shown in Fig. 2.

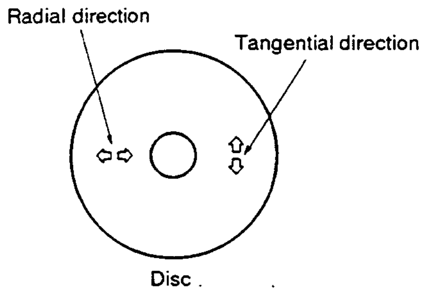
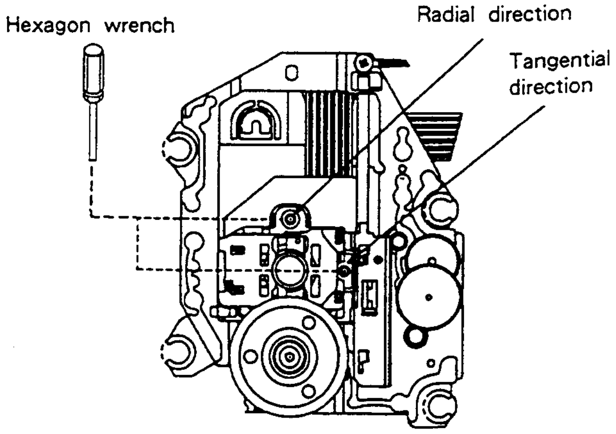


Fig. 2



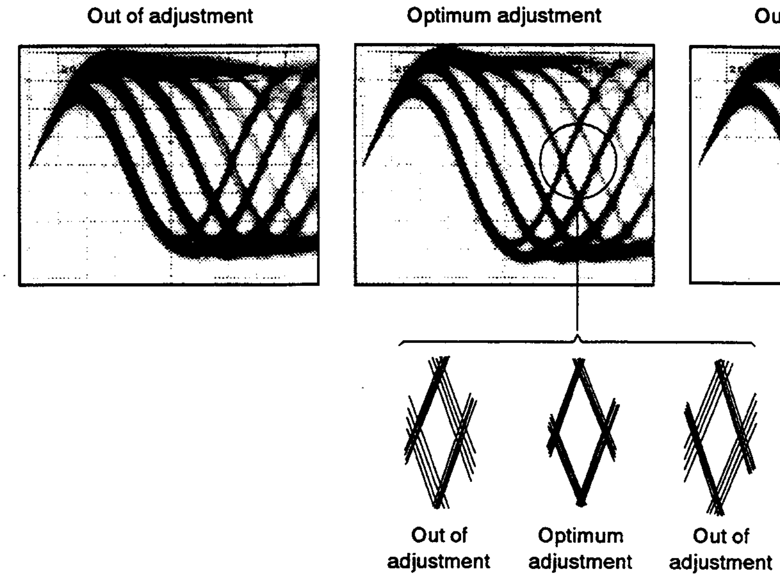


Fig. 3 Eye Pattern

RF Level Verification

• Objective • Symptom when out of adjustment	To verify the playback RF signal amplitude. No play or no search		
• Measurement Instrument Connections	Connect the oscilloscope to TP1, Pin1 (RF). [Settings] 50mV／division 10ms／division AC mode	• Player State • Adjustment Location • Disc	Test mode, play None YEDS−7

[Procedure]

1. Move the pickup to midway across the disc (R=35mm) with the MANUAL／TRACK SEARCH FWD ▷▷ • ▷▷| key or REV |◁◁ • ◁◁ key, then press the DOLBY NR key, the PLAY／PAUSE ▷／‖ key twice in that order to close the respective servos and put the player into play mode.
2. Verify the RF signal amplitude is 1.2Vp−p±0.2V.

Focus Servo Loop Gain Adjustment

● Objective	To optimize the focus servo loop gain.		
● Symptom when out of adjustment	Playback does not start or focus actuator noisy.		
● Measurement Instrument Connections	See Fig. 4. [Settings] CH1 20mV／division X−Y mode CH2 5mV／division	● Player State ● Adjustment Location ● Disc	Test mode, play VR8152 (FCS GAN) YEDS−7

[Procedure]

1. Set the AF generator output to 1.2kHz and 1Vp−p.
2. Press the MANUAL／TRACK SEARCH FWD ▷▷ • ▷▷| key or REV |◁◁ • ◁◁ key to move the pickup to halfway across the disc (R=35mm), then press the DOLBY NR key, the PLAY／PAUSE ▷／|| key twice in that order to close the corresponding servos and put the player into play mode.
3. Adjust VR8152 (FCS GAN) so that the Lissajous waveform is symmetrical about the X axis and the Y axis.

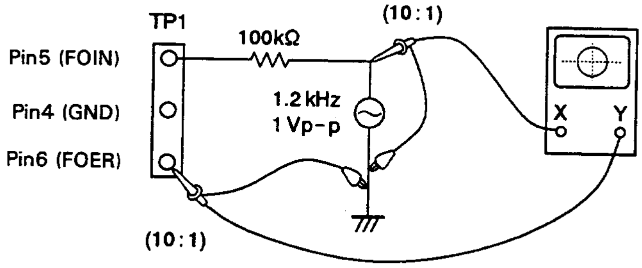
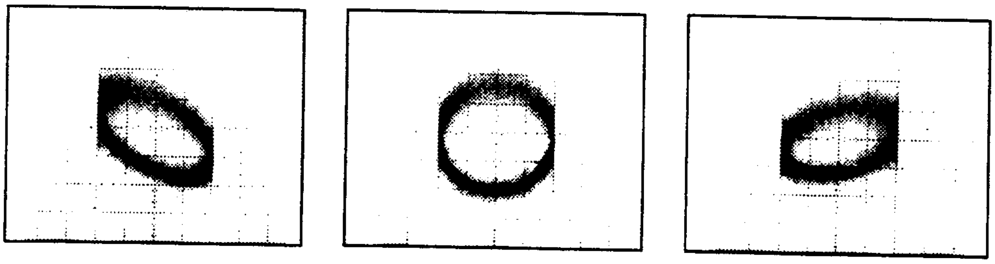


Fig. 4

Focus Gain Adjustment



Higher gain

Optimum gain

Lower gain

Tracking Servo Loop Gain Adjustment

● Objective	To optimize the tracking servo loop gain.		
● Symptom when out of adjustment	Playback does not start, during searches the actuator is noisy, or tracks are skipped.		
● Measurement Instrument Connections	See Fig. 5. [Settings] CH1 50mV/division X−Y mode CH2 20mV/division	● Player State	Test mode, play
		● Adjustment Location	VR8151 (TRK GAN)
		● Disc	YEDS−7

[Procedure]

1. Set the AF generator output to 1.2kHz and 2Vp−p.
2. Press the MANUAL/TRACK SEARCH FWD ▷▷ • ▷▷▯ key or REV ▯◁◁ • ◁◁ key to move the pickup to halfway across the disc (R=35mm), then press the DOLBY NR key, the PLAY/PAUSE ▷/▯▯ key twice in that order to close the corresponding servos and put the player into play mode.
3. Adjust VR8151 (TRK GAN) so that the Lissajous waveform is symmetrical about the X axis and the Y axis.

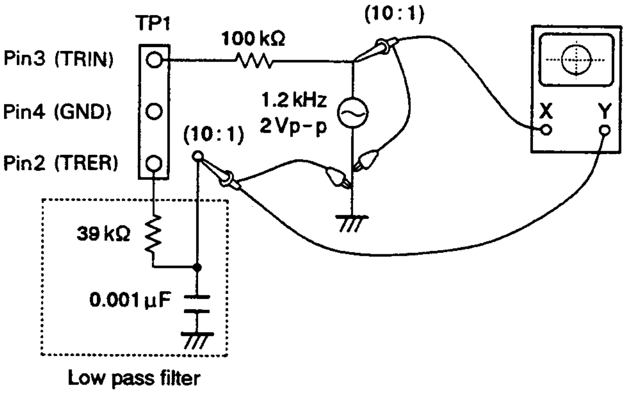
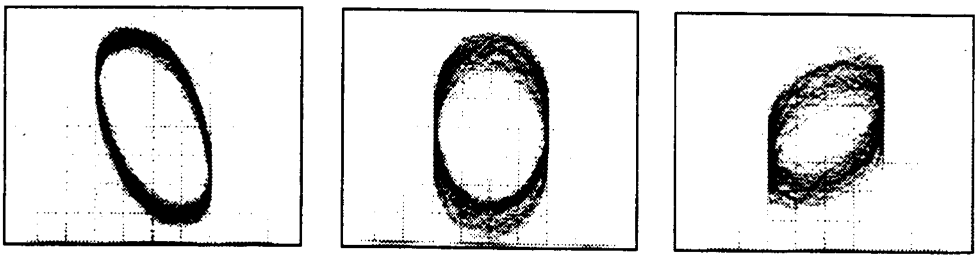


Fig. 5

Tracking Gain Adjustment



Higher gain

Optimum gain

Lower gain

1.8 PARTS LIST FOR PACKING AND EXPLODED VIEWS

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

(1) PACKING

(1)−1. FOR XR−P740M, XR−P740, XR−P640M AND XR−P640

■ For XR−P740M/SD

Mark	No.	Description	Parts No.
	1	MAGAZINE ASSY	PXA1549
	2	OPERATING INSTRUCTIONS (ECS−1,2,3/S/M)	ARC7006
	3	REMOTE CONTROL UNIT (CU−XR012)	AXD7007
	4	BATTERY COVER	AZA7032
	5	FM ANTENNA	ADH1016
	6	....	
	7	LOOP ANTENNA (L8043)	ATB1012
	8	FRONT PAD LR	AHA7004
	9	REAR PAD LR	AHA7005
	10	PACKING CASE	AHD7039
	11	SHEET	AHG7004

■ For XR−P740M/YPW, XR−P740/SD, XR−P640M/SD, YPW and XR−P640/SD

Part number differs between XR−P740M/YPW, XR−P740/SD, XR−P640M/SD, YPW, XR−P640/SD and XR−P740M/SD

Mark	No.	Symbol & Description	Part No.						Remarks
			XR−P740M		XR−P740	XR−P640M		XR−P640	
			SD	YPW	SD	SD	YPW	SD	
	2	Operating instructions (English/Spanish/Chinese)	ARC7006	....	ARC7006	ARC7006	....	ARC7006	
	2	Operating instructions (English)	....	ARB7006	....	....	ARB7006	....	
	10	Packing case	AHD7039	AHD7039	AHD7038	AHD7037	AHD7037	AHD7036	
	3	Remote control unit (CU−XR012)	AXD7007	AXD7007	AXD7007	....	....	....	
	3	Remote control unit (CU−XR010)	....	....	....	AXD7002	AXD7002	AXD7002	
	1	Magazine assy	PXA1549	PXA1549	....	PXA1549	PXA1549	....	

(1)−2. FOR XR−P340M AND XR−P340

For XR−P340M/KU

Mark	No.	Description	Parts No.
	1	MAGAZINE ASSY	PXA1549
	2	OPERATING INSTRUCTIONS (E−1, 2, 3/S/M)	ARB7006
	3	REMOTE CONTROL UNIT (CU−XR009)	AXD7001
	4	BATTERY COVER	AZA7031
	5	FM ANTENNA	ADH1016
	6	…………………	
	7	LOOP ANTENNA (L8043)	ATB1012
	8	FRONT PAD LR	AHA7002
	9	REAR PAD LR	AHA7003
	10	PACKING CASE	AHD7035
	11	SHEET	AHG7003

For XR−P340M/KC, SD, YPW, XR−P340/SD and YPW

Part number differs between XR−P340M/KC, SD, YPW, XR−P340/SD, YPW and XR−P340M/KU

Mark	No.	Symbol & Description	Part No.						Remarks
			XR−P340M				XR−P340		
			KU	KC	SD	YPW	SD	YPW	
	2	Operating instructions (English)	ARB7006	ARB7006	…………	ARB7006	…………	ARB7006	
	2	Operating instructions (English/Spanish/Chinese)	…………	…………	ARC7006	…………	ARC7006	…………	
	2	Operating instructions (French)	…………	ARC7007	…………	…………	…………	…………	
	10	Packing case	AHD7035	AHD7035	AHD7034	AHD7034	AHD7033	AHD7033	
	1	Magazine assy	PXA1549	PXA1549	PXA1549	PXA1549	…………	…………	

(2) EXPLODED VIEWS

(2)−1. EXTERIOR

■ **For XR−P740M, XR−P740, XR−P640M and XR−P640**

● **For XR−P740M/SD**

Mark	No.	Description	Parts No.
⚠	1	POWER TRANSFORMER (T8005)	ATS7015
⚠	2	FUSE (T2.5A/250V, FU1)	AEK−512
⚠	3	AC POWER CORD	ADG1051
	4	STRAIN RELIEF	AEC−882
NSP	5	GROUND LEAD	ADB1001
⚠	6	FLEXIBLE CABLE (J1)	ADD1127
	7	MULTI MECHA ASSY	AXA7006
	8	CASSETTE MOD. BC	EXK2420
NSP	9	CHASSIS	ANA7001
	10	REAR PANEL	ANC7036
	11	RUBBER SHEET	AEB1111
	12	TRANS FRAME	ANA7002
	13	BRACKET	ANG7002
	14	NYLON BINDER	AEC−093
	15	PCB SPACER (3×12)	AEC1372
	16	PCB CONNECTOR (PVC)	AEC1500
	17	FRONT PANEL ASSY	AMB7084
	18	TUNER PLATE	AAK7012
	19	DOLBY PLATE	AAK7013
	20	DECK PLATE LR	AAK7018
	21	....	
	22	....	
	23	JOG KNOB	AAB7006
	24	VOL KNOB	AAB7021
	25	BALANCE KNOB	AAB7008
	26	P. BASS KNOB	AAB7013
	27	BONNET	ANE7005
	28	AF CD ASSY	AWZ7095
	29	VR ASSY	AWZ7282
	30	H. P ASSY	AWZ7105
	31	SECONDRY TRANS ASSY	AWZ7211
	32	DISPLAY ASSY	AWZ7215
	33	CD DECK SW ASSY	AWZ7125
	34	TRANS PRIMARY ASSY	AWZ7130
	35	PROLOGIC ASSY	AWZ7138
	36	ADDON DISPLAY ASSY	AWZ7141
	37	FM/AM TUNER MODULE	AXQ1012
	38	POWER MOD. F100+R20	AXQ1019
	39	SCREW (P2.6×8)	ABA1095
	40	SCREW	ASZ40P060FMC
	41	SCREW	BBZ30P060FMC
	42	SCREW	BBZ30P080FZK
	43	....	
	44	SCREW	BPZ26P080FMC
	45	SCREW	CBZ30P080FMC
	46	SCREW	VPZ30P080FZK
	47	FRONT PANEL A	AMB7059
	48	LENS	AAK7021
	49	AMP. TUNER BUTTON	AAD7048
	50	DOOR−L	AAN7016
	51	DOOR−R	AAN7020
	52	CATCHER	AEC7001
	53	DOOR SPRING (L)	ABH7001
	54	DOOR SPRING (R)	ABH7002
	55	DECK. CD BUTTON	AAD7049
	56	M−CD PANEL	AAK7016
	57	DAMPER ASSY	AXA7001
	58	KEEP PLATE	ABK1017
	59	FRONT PANEL B	AMB7067
	60	DOLBY BUTTON	AAD7007
	61	LEVEL BUTTON	AAD7012
	62	DOOR SHAFT	AXA7003
	63	DAMPER	PXA1484
	64	DOOR SPRING	ABH7003
	65	MULTI BUTTON	AAD7009
	66	MULTI DOOR	AAK7017
	67	LOCK LEVER SPRING	ABH7004
	68	SCREW	BPZ20P080FMC
⚠	69	VOLTAGE SELECTOR (S8001)	AKX−507
⚠	70	FUSE (T2.5A/250V, FU2)	AEK−512
	71	GROUND LEAD	ADB1005
NSP	72	PARALLEL WIRE (J2)	D20PYY0615E

● For XR−P740M/YPW, XR−P740/SD, XR−P640M/SD, YPW and XR−P640/SD

Part number differs between XR−P740M/YPW, XR−P740/SD, XR−P640M/SD, YPW, XR−P640/SD and XR−P740M/SD

Mark	No.	Symbol & Description	Part No.						Remarks
			XR−P740M		XR−P740	XR−P640M		XR−P640	
			SD	YPW	SD	SD	YPW	SD	
	28	AF CD assy	AWZ7095	AWZ7095	AWZ7281	AWZ7091	AWZ7091	AWZ7089	
	29	VR assy	AWZ7282	AWZ7282	AWZ7282	AWZ7099	AWZ7099	AWZ7099	
	32	DISPLAY assy	AWZ7215	AWZ7215	AWZ7214	AWZ7118	AWZ7118	AWZ7116	
	33	CD DECK SW assy	AWZ7125	AWZ7125	AWZ7124	AWZ7125	AWZ7125	AWZ7124	
	34	TRANS PRIMARY assy	AWZ7130	AWZ7127	AWZ7130	AWZ7130	AWZ7127	AWZ7130	
	35	PROLOGIC assy	AWZ7138	AWZ7138	AWZ7138	…………	…………	…………	
	35	DOL SURR assy	…………	…………	…………	AWZ7137	AWZ7137	AWZ7137	
	36	ADDON DISPLAY assy	AWZ7141	AWZ7141	AWZ7141	AWZ7139	AWZ7139	AWZ7139	
	7	MULTI MECHA assy	AXA7006	AXA7006	…………	AXA7006	AXA7006	…………	
	7	SINGLE MECHA assy	…………	…………	AXA7004	…………	…………	AXA7004	
⚠	69	S8001 Voltage selector	AKX−507	…………	AKX−507	AKX−507	…………	AKX−507	
⚠	1	T8005 Power transformer	ATS7015	ATS7015	ATS7015	ATS7013	ATS7013	ATS7013	
⚠	3	AC power cord	ADG1051	ADG1123	ADG1051	ADG1051	ADG1123	ADG1051	
⚠	70	FU2 Fuse (T2.5A/250V)	AEK−512	…………	AEK−512	AEK−512	…………	AEK−512	
	17	Front panel assy	AMB7084	AMB7084	AMB7083	AMB7082	AMB7082	AMB7081	
	47	├─ Front panel A	AMB7059	AMB7059	AMB7058	AMB7056	AMB7056	AMB7055	
	59	├─ Front panel B	AMB7067	AMB7067	AMB7067	AMB7065	AMB7065	AMB7065	
	64	├─ Door spring	ABH7003	ABH7003	…………	ABH7003	ABH7003	…………	
	62	├─ Door shaft	AXA7003	AXA7003	…………	AXA7003	AXA7003	…………	
	63	├─ Damper	PXA1484	PXA1484	…………	PXA1484	PXA1484	…………	
	68	├─ Screw	BPZ20P080FMC	BPZ20P080FMC	…………	BPZ20P080FMC	BPZ20P080FMC	…………	
	56	├─ M−CD panel	AAK7016	AAK7016	…………	AAK7016	AAK7016	…………	
	56	├─ S−CD panel	…………	…………	AAK7053	…………	…………	AAK7053	
	66	└─ Multi door	AAK7017	AAK7017	…………	AAK7017	AAK7017	…………	
	10	Rear panel	ANC7036	ANC7040	ANC7035	ANC7029	ANC7033	ANC7028	
	65	Multi button	AAD7009	AAD7009	…………	AAD7009	AAD7009	…………	
	67	Lock lever spring	ABH7004	ABH7004	…………	ABH7004	ABH7004	…………	
	71	Ground lead	ADB1005	ADB1005	…………	ADB1005	ADB1005	…………	
	19	Dolby plate	AAK7013	AAK7013	AAK7013	AAK7014	AAK7014	AAK7014	
	21	Tray cap	…………	…………	AAK7020	…………	…………	AAK7020	
	42	Screw (for CD MECHA assy)	BBZ30P080FZK	BBZ30P080FZK	BBZ30P180FMC	BBZ30P080FZK	BBZ30P080FZK	BBZ30P180FMC	※
	73	Caution label	…………	VRW−329	…………	…………	VRW−329	…………	

※ : *Refer to page 2−3 (∗3).*

■ For XR－P340M and XR－P340

● For XR－P340M/KU

Mark	No.	Description	Parts No.
⚠	1	POWER TRANSFORMER (T8005)	ATS7009
⚠	2	FUSE (4A/125V, FU1)	AEK－125
⚠	3	AC POWER CORD	ADG1146
	4	CORD STOPPER	AEP－113
NSP	5	GROUND LEAD	ADB1001
⚠	6	FLEXIBLE CABLE (J1)	ADD1127
	7	MULTI MECHA ASSY	AXA7006
	8	CASSETTE MOD. B	EXK2430
NSP	9	CHASSIS	ANA7001
	10	REAR PANEL	ANC7026
	11	RUBBER SHEET	AEB1111
	12	BRACKET	ANG7002
	13	NYLON BINDER	AEC－093
	14	PCB SPACER (3×12)	AEC1372
	15	PCB CONNECTOR (PVC)	AEC1500
	16	FRONT PANEL ASSY	AMB7075
	17	TUNER PLATE	AAK7012
	18	DECK PLATE LR	AAK7018
	19	....	
	20	....	
	21	JOG KNOB	AAB7006
	22	VOL KNOB	AAB7021
	23	P. BASS KNOB	AAB7013
	24	BONNET	ANE7003
	25	AF CD ASSY	AWZ7088
	26	VR ASSY	AWZ7270
	27	H. P ASSY	AWZ7103
	28	SECONDRY TRANS ASSY	AWZ7107
	29	DISPLAY ASSY	AWZ7113
	30	CD DECK SW ASSY	AWZ7125
	31	TRANS PRIMARY ASSY	AWZ7131
	32	FM/AM TUNER MODULE	AXQ1012
	33	POWER MOD. F50	AXQ1018
	34	SCREW (P2.6×8)	ABA1095
	35	SCREW	ASZ40P060FMC
	36	SCREW	BBZ30P060FMC
	37	SCREW	BBZ30P080FZK
	38	....	
	39	SCREW	BPZ26P080FMC
	40	SCREW	CBZ30P080FMC
	41	SCREW	VPZ30P080FZK
	42	FRONT PANEL A	AMB7054
	43	LENS	AAK7021
	44	AMP. TUNER BUTTON	AAD7048
	45	DOOR－L	AAN7016
	46	DOOR－R	AAN7019
	47	CATCHER	AEC7001
	48	DOOR SPRING (L)	ABH7001
	49	DOOR SPRING (R)	ABH7002
	50	DECK. CD BUTTON	AAD7049
	51	M－CD PANEL	AAK7016
	52	DAMPER ASSY	AXA7001
	53	KEEP PLATE	ABK1017
	54	TRANS FRAME	ANA7002
	55	65 LABEL	ORW1069
	56	DOOR SHAFT	AXA7003
	57	DOOR SPRING	ABH7003
	58	MULTI BUTTON	AAD7009
	59	MULTI DOOR	AAK7017
	60	LOCK LEVER SPRING	ABH7004
	61	DAMPER	PXA1484
	62	SCREW	BPZ20P080FMC
	63	GROUND LEAD	ADB1005
NSP	64	PARALLEL WIRE (J2)	D20PYY0615E

● For XR−P340M/KC, SD, YPW, XR−P340/SD and YPW

Part number differs between XR−P340M/KC, SD, YPW, XR−P340/SD, YPW and XR−P340M/KU

Mark	No.	Symbol & Description	Part No.						Remarks
			XR−P340M				XR−P340		
			KU	KC	SD	YPW	SD	YPW	
	25	AF CD assy	AWZ7088	AWZ7088	AWZ7086	AWZ7086	AWZ7084	AWZ7084	
	26	VR assy	AWZ7270	AWZ7270	AWZ7280	AWZ7080	AWZ7080	AWZ7080	
	29	DISPLAY assy	AWZ7113	AWZ7113	AWZ7114	AWZ7114	AWZ7110	AWZ7110	
	30	CD DECK SW assy	AWZ7125	AWZ7125	AWZ7125	AWZ7125	AWZ7124	AWZ7124	
	31	TRANS PRIMARY assy	AWZ7131	AWZ7131	AWZ7130	AWZ7127	AWZ7130	AWZ7127	
	8	CASSETTE MOD. B	EXK2430	EXK2410	EXK2410	EXK2410	EXK2410	EXK2410	
	7	MULTI MECHA assy	AXA7006	AXA7006	AXA7006	AXA7006	....	....	
	7	SINGLE MECHA assy	....	....	....	....	AXA7004	AXA7004	
⚠	66	S8001 Voltage selector	....	....	AKX−507	....	AKX−507	....	
⚠	1	T8005 Power transformer	ATS7009	ATS7009	ATS7010	ATS7010	ATS7010	ATS7010	
⚠	3	AC power cord	ADG1146	ADG1146	ADG1051	ADG1123	ADG1051	ADG1123	
⚠	65	FU2 Fuse (T1A/250V)	....	....	AEK−508	....	AEK−508	....	
	16	Front panel assy	AMB7075	AMB7075	AMB7075	AMB7075	AMB7074	AMB7074	
	42	Front panel A	AMB7054	AMB7054	AMB7054	AMB7054	AMB7053	AMB7053	
	57	Door spring	ABH7003	ABH7003	ABH7003	ABH7003	....	....	
	56	Door shaft	AXA7003	AXA7003	AXA7003	AXA7003	....	....	
	61	Damper	PXA1484	PXA1484	PXA1484	PXA1484	....	....	
	62	Screw	BPZ20P080FMC	BPZ20P080FMC	BPZ20P080FMC	BPZ20P080FMC	....	....	
	51	M−CD panel	AAK7016	AAK7016	AAK7016	AAK7016	....	....	
		S−CD panel	....	....	....	....	AAK7053	AAK7053	
	59	Multi door	AAK7017	AAK7017	AAK7017	AAK7017	....	....	
	10	Rear panel	ANC7026	ANC7027	ANC7021	ANC7025	ANC7020	ANC7024	
	58	Multi button	AAD7009	AAD7009	AAD7009	AAD7009	....	....	
	60	Lock lever spring	ABH7004	ABH7004	ABH7004	ABH7004	....	....	
	63	Ground lead	ADB1005	ADB1005	ADB1005	ADB1005	....	....	
	4	Cord stopper	AEP−113	AEP−113	AEC−882	AEC−882	AEC−882	AEC−882	
	54	Trans frame	ANA7002	ANA7002	....	....	....	....	
	20	Tray cap	....	....	....	....	AAK7020	AAK7020	
	35	Screw	ASZ40P060FMC	ASZ40P060FMC	ASZ30P060FZK	ASZ30P060FZK	ASZ30P060FZK	ASZ30P060FZK	
	37	Screw (for CD MECHA assy)	BBZ30P080FZK	BBZ30P080FZK	BBZ30P080FZK	BBZ30P080FZK	BBZ30P180FMC	BBZ30P180FMC	※
	55	65 lavel	ORW1069	....	....	....	....	....	
	67	Caution label	....	....	....	VRW−329	....	VRW−329	

※ : *Refer to page 2−6 (✱3).*

(2)−2. CASSETTE MECHA SECTION (FOR ALL MODELS)

Mark	No.	Description	Parts No.
	1	SPRING	EBH1467
	2	SPRING	EBH1475
	3	SPRING	EBL1021
	4	SPRING	EBH1478
	5	SPRING	EBH1483
	6	SPRING	EBH1472
	7	SPRING	EBH1496
	8	SPRING	EBH1495
	9	ARM	ENV1431
	10	BRAKE	ENV1395
	11	ARM	ENV1394
	12	GEAR	ENV1393
	13	PULLEY	ENV1291
	14	REEL	ENV1385
	15	GEAR	ENV1383
	16	REEL	ENV1384
	17	ARM	ENV1400
	18	BUSH	ENV1386
	19	ARM	ENV1403
	20	LIMITER UNIT	EXA1349
	21	FLYWHEEL UNIT	EXA1330
	22	FLYWHEEL UNIT	EXA1329
	23	ROLLER UNIT	EXA1352
	24	ROLLER UNIT	EXA1353
	25	FLYWHEEL UNIT	EXA1322
	26	FLYWHEEL UNIT	EXA1321
	27	SHAFT	ELA1332
	28	SPRING	EBH1468
	29	SOLENOID	EXP1011
	30	ARM	ENC1359
	31	ARM	ENC1358
	32	BRACKET	ENC1357
	33	BRACKET	AZN7094
	34	BELT	ENT1033
	35	BELT	ENT1032
	36	CHASSIS UNIT	EXA1348
	37	HEAD BASE ASSY	EXX1031
	38	MOTOR ASSY	EXX1030
	39	HEAD BASE ASSEMBLY	EXX1029
	40	SUB COMPLEX PCB	ENX1026
	41	SUB COMPLEX PCB	ENX1022
	42	DECK UNIT (For EXK2420)	EWM1002
	42	DECK UNIT (For EXK2410 and EXK2430)	EWM1001
	43	SCREW	BSZ20P035FMC
	44	SCREW	PMS26P025FUC
	45	SCREW	BSZ20P030FMC
	46	SCREW	ATZ26P080FMC
	47	WASHER	EBF1028
	48	WASHER	EBF1027
	49	SWITCH (AR−R)	ESN1009
	50	SWITCH (CrO2)	ESN1009
	51	SWITCH (AR−F)	ESN1009
	52	SWITCH (CrO2)	ESN1009
	53	SWITCH (HALF)	ESG1002
	54	CONNECTOR	EKS1012
	55	CONNECTOR	EKS1017
	56	PHOTO INTERRUPTER	ON1004
	57	LEAD WIRE	EDE1012
	58	RESISTOR	ERD25T561S
	59	SCREW (For AZIMUTH)	EBA1034
	60	CASSETTE MECHA UNIT (For EXK2420 and EXK2410)	EXA1347
	60	CASSETTE MECHA UNIT (For EXK2430)	EXA1362
	61	SPRING	EBL1019
	62	HEAD UNIT	EXA1316
	63	HEAD UNIT	EXA1317
	64	SPRING	EBL1473
	65	SPRING	EBL1474
	66	SPRING	EBL1476
	67	SPRING	EBL1479
	68	LEVER	ENC1349
	69	SCREW	EBA1035

(2)−3. CD MULTI MECHA ASSY (FOR XR−P740M, XR−P640M AND XR−P340M)

Mark	No.	Description	Parts No.
	1	MOTOR PULLEY	PNW1634
	2	GEAR HOLDER	PNW1929
	3	PU FREXIBLE CABLE	PNP1343
	4	CAM GEAR	PNW1923
	5	BELT	PEB1138
	6	TOP GUIDE N	PNW2441
	7	GEAR PULLEY	PNW1918
	8	GEAR S	PNW1919
	9	GEAR L	PNW1920
	10	EJECT SPRING	PBH1107
	11	SWITCH LEVER	PNW1927
	12	SEVEN BAR	PNW1931
	13	SUB ROTARY LEVER	PNW1933
	14	SUB ROTARY LEVER SPRING	PBH1111
	15	ROTARY LEVER	PNW1932
	16	DRIVE PLATE	PNW1930
	17	MOTOR SCREW	PBA−112
	18	HOLDER LEVER SPRING	PBH1110
	19	DISC HOLDER	PNW1924
	20	CUSHION A	PED1001
	21	HOLDER LEVER	PNW1925
	22	FLOAT RUBBER	PEB1014
	23	FLOAT RUBBER	PEB1132
	24	FLOAT SCREW	PBA1073
	25	RELEASE LEVER	PNW1934
	26	RELEASE SPRING	PBH1106
	27	CLAMPER CAM	PNW1922
	28	CLAMPER HOLDER	PNW1921
	29	CLAMPER SPRING	PBH1109
	30	CLAMPER	PNW1857
	31	LOCK LEVER	PNW1917
	32	LOCK SPRING	PBH1108
	33	STAIR NL	PNW2443
	34	STAIR NR	PNW2444
	35	SYNCHRONIZE LEVER	PNW1926
	36	MOTOR ASSY (LOADING, DISC SELECT)	PEA1130
	37	SCREW	PMZ26P040FMC
	38	SCREW	PPZ30P080FMC
	39	SCREW	BBZ30P060FMC
	40	WASHER	WT26D047D025
	41	WASHER	WA31D054D025
	42	E RING	Z39−010
	43	SCREW	IPZ30P080FMC
	44	RUBBER SPACER	PEB1238
	45	RUBBER SPACER	PEB1179
	46	SILENT RING	PBK1093
	47	WASHER	WA62D130D025
	48	EARTH SPRING	PBH1132
	49	GUIDE BAR	PLA1094
	50	DISC TABLE	PNW1067

Mark	No.	Description	Parts No.
	51	GEAR 1	PNW2052
	52	GEAR 2	PNW2053
	53	GEAR 3	PNW2054
	54	PINION GEAR	PNW2055
	55	PWB HOLDER	PNW2057
NSP	56	CARRIAGE DC MOTOR/0.3W	PXM1027
	57	D.C. MOTOR ASSY (SPINDLE, with OIL)	PEA1235
	58	PICKUP ASSY	PEA1179
	59	DISC TABLE ASSY	PEA1035
	60	SCREW	BBZ26P060FMC
	61	SCREW	BPZ20P060FMC
	62	SCREW	BPZ26P100FMC
	63	SCREW	JFZ17P025FZK
	64	SCREW	JFZ20P040FMC
	65	WASHER	WT12D032D025
	66	....	
	67	STOP SPRING	PBH1131
	68	STOPPER	PNW2069
	69	CARRIAGE DC MOTOR ASSY	PEA1246
NSP	101	MOTOR	VXM1033
NSP	102	EJECT LEVER	PNB1306
	103	UPPER CHASSIS N	PNB1267
NSP	104	SERVO MECHANISM ASSY M	PXA1537
NSP	105	LOADING BOARD ASSY	AWZ7207
	106	SUB CHASSIS N	PNW2440
	107	....	
NSP	108	MAIN CHASSIS	PNW2074
NSP	109	SELECT BOARD ASSY	AWZ7209
NSP	110	MOTOR BOARD ASSY	AWZ7208
NSP	111	MECHANISM BOARD ASSY	PWX1192
NSP	112	EARTH LEAD UNIT	PDF1074
NSP	113	CLAMP MAGNET	PMF1014
NSP	114	GEAR STOPPER	PNB1303
NSP	115	YOKE M	PNB1312
NSP	116	AV ANGLE	PNB1405
	117	CARRIAGE BASE	PNW2445

(2)−4. CD SINGLE MECHA ASSY (FOR XR−P740, XR−P640 AND XR−P340)

Mark	No.	Description	Parts No.
	1	LEVER SWITCH (CLAMP, S8001)	DSK1003
	2	FLOAT SCREW	PBA1048
	3	RUBBER BELT	PEB1193
	4	MOTOR PULLEY	PNW1634
	5	TRAY	PNW2265
	6	FLOAT BASE	PNW2032
	7	DRIVE GEAR 2	PNW2369
	8	GEAR PULLEY	PNW2034
	9	CLAMPER BASE	PNW2375
	10	CLAMP CAM	PNW2364
	11	DC MOTOR/0.75W (LOADING)	PXM1010
	12	FLOAT RUBBER	PEB1014
	13	FLOAT RUBBER	PEB1132
	14	SCREW	BPZ26P080FMC
	15	SCREW	Z39−018
	16	SCREW	PMZ26P040FMC
	17	PINION GEAR	PNW2055
NSP	18	DC MOTOR (CARRIAGE)	PXM1027
	19	DC MOTOR ASSY (SPINDLE)	PEA1235
	20	CARRIAGE BASE	PNW2058
	21	DISC TABLE	PNW1608
	22	SCREW	JFZ20P030FNI
	23	SCREW	JFZ17P025FZK
	24	GEAR 3	PNW2054
	25	GEAR 2	PNW2053

Mark	No.	Description	Parts No.
	26	WASHER	WT12D032D025
	27	PICKUP ASSY	PEA1179
	28	GUIDE BAR	PLA1094
	29	GEAR 1	PNW2052
NSP	30	GEAR STOPPER	PNB1303
	31	SCREW	BPZ20P060FMC
	32	PWB HOLDER	PNW2057
	33	SCREW	BPZ26P100FMC
NSP	34	EARTH LEAD UNIT	PDF1104
	35	SCREW	BBZ26P060FMC
NSP	36	MECHANISM BOARD ASSY	PWX1192
NSP	37	CLAMP MAGNET	PMF1014
NSP	38	YOKE	PNB1216
NSP	39	H RUBBER	PEB1249
NSP	40	CLAMPER S	PNW1609
NSP	41	LOADING BASE	PNW2376
	42	DC MOTOR ASSY (CARRIAGE)	PEA1246
NSP	43	SERVO MECHANISM ASSY	PXA1536
	44	SCREW	BBZ30P080FZK
NSP	45	CONNECTOR ASSY (4P)	PDE1238
NSP	46	CONNECTOR ASSY (5P)	PDE1239

(2)−5. POWER AMP MODULE SECTION (FOR ALL MODELS)

Mark	No.	Description	Parts No.
	1	FRONT ASSY FOR 100W (For AXQ1019)	AWZ5389
	1	FRONT ASSY FOR 50W (For AXQ1018)	AWZ5390
	2	REAR, PWR, PRTEC ASSY (For AXQ1019)	AWZ5391
	2	PWR, PRTEC ASSY (For AXQ1018)	AWZ5392
	3	HEAT SINK (AL)	ANH1446
	4	BRACKET	ANG1868
	5	SHEET	AEB1256
	6	MOLD A	AMR2594
	7	MOLD B	AMR2595
	8	SCREW (3×10)	ABA1021
	9	SCREW	BBZ30P140FZK
	10	SCREW	BPZ30P350FZK
	11	FAN MOTOR	AXM1019
	12	REGULATOR IC (IC7401)	MC7812CT
	13	REGULATOR IC (IC7402)	NJM7912A
	14	REGULATOR IC (IC7403)	MC7812CT
	15	REGULATOR IC (IC7404)	MC7805CT
⚠	16	TRANSISTOR (Q7111) (AXQ1019 only)	2SB1274
⚠	17	TRANSISTOR (Q7112) (AXQ1019 only)	2SB1274

Mark	No.	Description	Parts No.
⚠	18	TRANSISTOR (Q7113) (AXQ1019 only)	2SD1913
⚠	19	TRANSISTOR (Q7114) (AXQ1019 only)	2SD1913
	20	TRANSISTOR (Q7503) (AXQ1019 only)	2SC4793
	21	TRANSISTOR (Q7504) (AXQ1019 only)	2SC4793
	22	TRANSISTOR (Q7509) (AXQ1019 only)	2SA1837
	23	TRANSISTOR (Q7510) (AXQ1019 only)	2SA1837
⚠	24	TRANSISTOR (Q7511) (For AXQ1019)	2SA1264N
⚠	24	TRANSISTOR (Q7511) (For AXQ1018)	2SA1263N
⚠	25	TRANSISTOR (Q7512) (For AXQ1019)	2SA1264N
⚠	25	TRANSISTOR (Q7512) (For AXQ1018)	2SA1263N
⚠	26	TRANSISTOR (Q7513) (For AXQ1019)	2SC3181N
⚠	26	TRANSISTOR (Q7513) (For AXQ1018)	2SC3180N
⚠	27	TRANSISTOR (Q7514) (For AXQ1019)	2SC3181N
⚠	27	TRANSISTOR (Q7514) (For AXQ1018)	2SC3180N

1.9 PCB PARTS LIST

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω → 56 × 10¹ → 561 .... RD1/8PM $\boxed{5}\boxed{6}\boxed{1}$ J
47kΩ → 47 × 10³ → 473 .... RD1/4PS $\boxed{4}\boxed{7}\boxed{3}$ J
0.5Ω → 0R5 .... RN2H $\boxed{0}\boxed{R}\boxed{5}$ K
1Ω → 010 .... RS1P $\boxed{0}\boxed{1}\boxed{0}$ K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).
5.62kΩ → 562 × 10¹ → 5621 .... RM1/4PC $\boxed{5}\boxed{6}\boxed{2}\boxed{1}$ F

(1) FOR XR−P740M, XR−P740, XR−P640M AND XR−P640

(1)−1. LIST OF WHOLE PCB ASSEMBLIES

Mark	Symbol & Description	Part No.						Remarks
		XR−P740M		XR−P740	XR−P640M		XR−P640	
		SD	YPW	SD	SD	YPW	SD	
	MAIN assy	AWK7041	AWK7041	AWK7080	AWK7037	AWK7037	AWK7035	
	├─ AF CD assy	AWZ7095	AWZ7095	AWZ7281	AWZ7091	AWZ7091	AWZ7089	
	├─ H. P assy	AWZ7105	AWZ7105	AWZ7105	AWZ7105	AWZ7105	AWZ7105	
	├─ SECONDRY TRANS assy	AWZ7211	AWZ7211	AWZ7211	AWZ7211	AWZ7211	AWZ7211	
	└─ VR assy	AWZ7282	AWZ7282	AWZ7282	AWZ7099	AWZ7099	AWZ7099	
	COMPLEX assy	AWM7050	AWM7051	AWM7081	AWM7040	AWM7041	AWM7034	
	├─ CD DECK SW assy	AWZ7125	AWZ7125	AWZ7124	AWZ7125	AWZ7125	AWZ7124	
	├─ TRANS PRIMARY assy	AWZ7130	AWZ7127	AWZ7130	AWZ7130	AWZ7127	AWZ7130	
	└─ DISPLAY assy	AWZ7215	AWZ7215	AWZ7214	AWZ7118	AWZ7118	AWZ7116	
	PRO LOGIC assy	AWM7054	AWM7054	AWM7054	....	....	....	
	├─ PROLOGIC assy	AWZ7138	AWZ7138	AWZ7138	....	....	....	
	└─ ADDON DISPLAY assy	AWZ7141	AWZ7141	AWZ7141	....	....	....	
	DOLBY SURROUND assy	....	....	....	AWM7053	AWM7053	AWM7053	
	├─ DOL SURR assy	....	....	....	AWZ7137	AWZ7137	AWZ7137	
	└─ ADDON DISPLAY assy	....	....	....	AWZ7139	AWZ7139	AWZ7139	
	MULTI MECHA assy	AXA7006	AXA7006	....	AXA7006	AXA7006	....	
NSP	├─ LOADING BOARD assy	AWZ7207	AWZ7207	....	AWZ7207	AWZ7207	....	
NSP	├─ MOTOR BOARD assy	AWZ7208	AWZ7208	....	AWZ7208	AWZ7208	....	
NSP	├─ SELECT BOARD assy	AWZ7209	AWZ7209	....	AWZ7209	AWZ7209	....	
NSP	└─ MECHANISM BOARD assy	PWX1192	PWX1192	....	PWX1192	PWX1192	....	
	SINGLE MECHA assy	....	....	AXA7004	....	....	AXA7004	
NSP	└─ MECHANISM BOARD assy	....	....	PWX1192	....	....	PWX1192	
	FM/AM TUNER MODULE	AXQ1012	AXQ1012	AXQ1012	AXQ1012	AXQ1012	AXQ1012	
	POWER MOD. F100+R20	AXQ1019	AXQ1019	AXQ1019	AXQ1019	AXQ1019	AXQ1019	
	├─ FRONT ASSY FOR 100W	AWZ5389	AWZ5389	AWZ5389	AWZ5389	AWZ5389	AWZ5389	
	└─ REAR, PWR, PRTEC ASSY	AWZ5391	AWZ5391	AWZ5391	AWZ5391	AWZ5391	AWZ5391	
	CASSETTE MECHA MOD. BC	EXK2420	EXK2420	EXK2420	EXK2420	EXK2420	EXK2420	
	└─ DECK unit	EWM1002	EWM1002	EWM1002	EWM1002	EWM1002	EWM1002	

(1)-2. FOR XR-P740M/SD

AF CD ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC8151		CXA1372Q
	IC8301		CXD2517Q
	IC1001		ICP-N70
	IC8201, IC8202 LA6520		
	IC2104		M66311FP
	IC2101		MC14052BF
	IC2103, IC2201-IC2203, IC3301, IC3501		NJM4558M-D
	IC3601, IC8405		NJM4558M-D
	IC8402		TC7S04F
	IC2102		TC9162N
	IC8401		TC9268F
	Q1051, Q1053		2SA1048
	Q1002, Q1006, Q1040		2SA1515
	Q1005, Q106		2SB560
	Q1052, Q1403, Q9001-Q9003, Q9005		2SC2458
	Q1003		2SC3377
	Q105		2SD438
	Q8401		2SK246
	Q1001, Q1007, Q1041		RN1201
	Q1004, Q9004		RN2201
	Q8402		RN2203
	D1001		D5SB20F
	D1021, D1022, D1027, D1031		HSS104-02
	D1153, D1154, D6901, D8301, D8401		HSS104-02
	D9001		HSS104-02
	D2201, D8211		HZS6CL
	D1010		HZS7BL
	D1002, D1003		RB152
	D1023		RD30ESB4
	D1151, D1152		RD5.1ESB
	D1011, D1012		RD5.6ESB2
	D1007, D1008, D1013-D1020		S5688G
	D1024, D1025, D1041-D1043, D1996-D1999		S5688G

CAPACITORS

Mark	No.	Description	Parts No.
	C1001, C1002 (6800/63)		ACH1247
	C2255, C8173, C8174		CCSQCH101J50
	C8403, C8404		CCSQCH150J50
	C3303, C3304		CCSQCH220J50
	C2204		CCSQCH331J50
	C8435-C8438		CCSQCH390J50
	C8429, C8430		CCSQCH560J50
	C8433, C8434		CEANP2R2M50
	C1019		CEAS010M50
	C1016		CEAS101M10
	C1011, C1012		CEAS101M16
	C1018		CEAS101M63
	C1007, C1225		CEAS220M50
	C1017		CEAS221M35
	C1004-C1006		CEAS222M35
	C2501, C2502		CEAS2R2M50
	C8216, C8217, C8302		CEAS330M16
	C8175, C8176		CEAS331M16
	C1003		CEAS332M35
	C1224		CEAS3R3M50
	C1013, C1014		CEAS470M16
	C2251, C2252		CEAS470M50
	C3301, C3302, C3501, C8160, C8162		CEAS4R7M50
	C2503, C2504		CEASR15M50
	C3502, C3601, C8309		CEASR47M50
	C8164, C8167, C8169, C8212		CKSQYB103K50
	C8306, C8441, C8442		CKSQYB152K50
	C3309, C3310, C8155		CKSQYB182K50
	C3503		CKSQYB223K50
	C3305, C3306		CKSQYB273K50
	C3307, C3308, C8170		CKSQYB332K50
	C8156, C8168		CKSQYB333K50
	C2201-C2203		CKSQYB471K50
	C8171, C8172		CKSQYB472K50
	C8307		CKSQYB473K50
	C3311, C3312, C8157, C8202, C8203		CKSQYF103Z50
	C8205-C8207		CKSQYF103Z50
	C1301-C1304, C2253, C2257		CKSQYF104Z50
	C8158, C8159, C8161, C8163, C8301		CKSQYF104Z50
	C8304, C8308, C8361, C8414, C8415		CKSQYF104Z50
	C8431, C8432, C8461, C8462		CKSQYF104Z50
	C1009		CQMA333K250

RESISTORS

Mark	No.	Description	Parts No.
	VR8151, VR8152 (22kΩ)		ACP1057
	R2125		RA11T103J
	R1159, R1160		RD1/2PM151J
	R1064, R1153, R1157		RD1/4PM102J
	R1041		RD1/4PM222J
	R1002		RD1/4PM272J
	R1020		RD1/4PM432J
	R1003		RD1/4PM472J
	R1019		RD1/4PM511J
	R1301, R1302		RD1/4PMF6R8J
	R1031, R2101, R2102, R2105-R2107		RD1/8PM102J
	R2111-R2113, R2117, R2129, R9007		RD1/8PM102J
	R1040, R1063, R1154, R1158		RD1/8PM103J
	R8368		RD1/8PM105J
	R1026		RD1/8PM114J
	R1015		RD1/8PM223J
	R1051		RD1/8PM331J
	R3502		RD1/8PM433J
	R1052		RD1/8PM471J
	R1151, R2136, R9001, R9002		RD1/8PM472J
	R2114		RD1/8PM473J
	R1013		RD1/8PM562J
	R2121, R2122		RD1/8PM912J
	R1006, R1016		RS1LMFR22J
	R1001		RS2LMF151J
	R1998		RS2LMF220J
	R1007, R1017		RS2LMFR22J
	R1999		RS3LMF3R9J
	Other Resistors		RS1/10S□□□J

OTHERS

Mark	No.	Description	Parts No.
	CN8131	CONNECTOR	12FMZ-ABT
	CN8204	6P JUMPER CONNECTOR	52147-0610
	CN2101	PIN JACK 2P (VIDEO/AUX)	AKB1171
		SPEAKER TERMINAL 4-P	AKE1026
	CN1	36P SOCKET	AKP1105

Mark	No.	Description	Parts No.
	CN10	JUMPER CONNECTOR	KPC6
	X8401	XTAL RES (OSC)	PSS1008
		PCB BINDER	VEF1008
	CN8202	CONNECTER	VKN1051
	CN8203	CONNECTOR 4P	4−173981−4

H.P ASSY

RESISTORS

	R1201, R1202		RS3LMF331J
		Other Resistors	RS1/10S□□□J

OTHERS

	CN1201	JACK	AKN1029

SECONDRY TRANS ASSY

SEMICONDUCTORS

	IC1002−IC1005		ICP−N70

VR ASSY

SEMICONDUCTORS

	IC1501, IC1502 NJM4558M−D		
	IC1551		TA8409S

CAPACITORS

	C1517, C1518		CCSQCH470J50
	C1554		CEAS101M16
	C1503, C1504, C1511−C1514		CEAS2R2M50
	C1501, C1502		CEYA2R2M50
	C1557, C1558		CKSQYB273K50
	C1509, C1510, C1519, C1520		CKSQYB473K50
	C1555, C1556		CKSQYB473K50
	C1551−C1553		CKSQYF104Z50

RESISTORS

	VR301	(100K−3B*4)	ACX1088
		Other Resistors	RS1/10S□□□J

CD DECK SW ASSY

SEMICONDUCTORS

	Q1701−Q1706		2SA1048
	D1708		AEL1131
	D1706, D1707, D1709−D1714		AEL1132

SWITCHES

	S1816−S1835		ASG1034

RESISTORS

	R1703		RD1/8PM201J
	R1704		RD1/8PM241J
		Other Resistors	RS1/10S□□□J

TRANS PRIMARY ASSY

COILS AND FILTERS

	L1101		ATF−151

CAPACITORS

	C1102	(0.01/400)	ACG1003

RESISTORS

		Other Resistors	RS1/10S□□□J

Mark	No.	Description	Parts No.

DISPLAY ASSY

SEMICONDUCTORS

	IC1951		M66311FP
	IC2501, IC3701−IC3703		NJM4558M−D
	IC1901		PD4493A
	Q1801		2SA1048
	Q1901		2SC2458
	Q1902		RN1201
	Q1707		RN2201
	D1701−D1705		AEL1118
	D1801−D1817, D1819, D1901, D1903		HSS104−02
	D1905, D1906, D3701−D3705		HSS104−02
	D1951, D1953		HZS6CL
	D1904		HZS7AL

COIL

	L1901		LAU220J

SWITCHES

	S1801−S1815		ASG1034
	S1901		ASX1021

CAPACITORS

	C1903		ACH1246
	C1952		CCSQCH101J50
	C2504		CCSQCH221J50
	C1907		CEJA010M50
	C1910, C2503, C2505		CEJA100M50
	C1905		CEJA221M10
	C1902		CEJA470M16
	C2502		CEJA4R7M50
	C1908		CFTYA224J50
	C1915, C1916		CKSQYB102K50
	C1954		CKSQYB103K50
	C2501		CKSQYB122K50
	C3710, C3711		CKSQYB152K50
	C3704, C3705		CKSQYB153K50
	C3713, C3714		CKSQYB471K50
	C3707, C3708		CKSQYB472K50
	C2507, C3701, C3702		CKSQYB473K50
	C2506		CKSQYB682K50
	C1909		CKSQYF102Z50
	C1955		CKSQYF103Z50
	C1901, C1904, C1906, C1911−C1914		CKSQYF473Z50
	C2508, C2509, C3703, C3706, C3709		CKSQYF473Z50
	C3712, C3715		CKSQYF473Z50

RESISTORS

	VR2501	(10K−B)	ACS1104
	R1701		RD1/8PM181J
	R1801−R1804		RD1/8PM223J
	R1941		RD1/8PM472J
	R1919		RD1/8PM473J
	R1935, R1938, R1939		RD1/8PM561J
		Other Resistors	RS1/10S□□□J

OTHERS

	V1701		AAV7002
		JACK	AKN1030
	CN1001	36P SOCKET	AKP1105
	X1901		ASS1018
		REMOTE RECEIVER UNIT	AXX1023

PROLOGIC ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC3406		LA2780N
	IC3410		LM3364K−15
	IC3408		LV1001M−A
	IC3402		MC14053BF
	IC3403−IC3405, IC3409		NJM4558M−D
	IC3401		TC9154AP
	Q3401, Q3402, Q3407, Q3408		2SC1740S
	Q3409		2SC2458
	Q3405		2SD438
	Q3403, Q3404, Q3406		RN2203
	D3401, D3403, D3404, D3406−D3410		HSS104−02
	D3412		RD5.1ESB

CAPACITORS

Mark	No.	Description	Parts No.
	C3403, C3404, C3407, C3408		CCSQCH101J50
	C3460, C3469		CCSQCH102J50
	C3455, C3470		CCSQCH151J50
	C3484		CCSQCH331J50
	C3410, C3430, C3440		CCSQCH681J50
	C3444, C3445, C3449, C3450		CEANL4R7M50
	C3429		CEANP100M35
	C3443		CEANPR33M50
	C3427		CEAS010M50
	C3416, C3419, C3421, C3422, C3426		CEAS100M50
	C3441, C3442, C3446		CEAS100M50
	C3417		CEAS101M16
	C3474		CEAS221M10
	C3464, C3471		CEAS221M16
	C3472		CEAS221M25
	C3413, C3414, C3476, C3477		CEAS2R2M50
	C3415		CEAS470M25
	C3466		CEAS471M16
	C3463, C3467		CEAS4R7M50
	C3452, C3453		CEASR15M50
	C3425		CEASR22M50
	C3457, C3458		CEYA3R3M50
	C3431, C3432		CEYAR33M50
	C3411		CFTYA103J50
	C3409, C3433, C3436, C3438, C3439		CFTYA104J50
	C3456		CFTYA104J50
	C3412		CFTYA153J50
	C3451, C3461, C3462		CFTYA154J50
	C3459, C3468		CFTYA223J50
	C3428		CFTYA333J50
	C3447		CFTYA334J50
	C3454		CFTYA473J50
	C3424		CFTYA683J50
	C3475		CKSQYB103K50
	C3434		CKSQYB471K50
	C3478, C3483		CKSQYB473K50
	C3418		CKSQYB562K50
	C3448		CKSQYB681K50
	C3465, C3473, C3479−C3482		CKSQYF104Z50
	C3423		CQMA392J50
	C3420		CQMA472J50
	C3435		CQMA562J50
	C3437		CQMA682J50

RESISTORS

Mark	No.	Description	Parts No.
	VR3401 (22kΩ)		ACP1044
	R3472		RD1/2PM561J
	R3473−R3475		RD1/8PM222J
	Other Resistors		RS1/10S□□□J

OTHERS

Mark	No.	Description	Parts No.
	CN3401	PIN JACK 3P (CENTER, REAR)	AKB1215
	X3401	CRYSTAL RESONATOR	ASS1015

ADDON DISPLAY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC3952		NJM4558M−D
	IC3951		PDG108A
	Q3951		2SA1515
	Q3952		RN2201
	D3951−D3954, D3956−D3960		HSS104−02
	D3955		HZS6C1L

COILS AND FILTERS

Mark	No.	Description	Parts No.
	L3951		LAU220K

SWITCHES

Mark	No.	Description	Parts No.
	S3951−S3955		ASG1034

CAPACITORS

Mark	No.	Description	Parts No.
	C3953, C3954		CEJA100M16
	C3951		CEJA100M50
	C3956		CEJA101M10
	C3952		CKSQYF102Z50
	C3961		CKSQYF104Z50
	C3957−C3960		CKSQYF473Z50

RESISTORS

Mark	No.	Description	Parts No.
	VR3951 (10K−B)		ACS1103
	R4029−R4032, R4034		RD1/8PM102J
	Other Resistors		RS1/10S□□□J

OTHERS

Mark	No.	Description	Parts No.
	V3951	FL TUBE	AAV7001
	X3951	CRYSTAL RESONATOR	ASS1015
	CN20	CONNECTOR (13P)	KPE13

LOADING BOARD ASSY

SWITCHES

Mark	No.	Description	Parts No.
	S601, S602		DSG1016

MOTOR BOARD ASSY

OTHERS

Mark	No.	Description	Parts No.
	CN602	6PJUMPER CONNECTOR	52151−0610

SELECT BOARD ASSY

SWITCHES

Mark	No.	Description	Parts No.
	S604−S606		DSG1016
	S603		PSG1010

MECHANISM BOARD ASSY

SWITCHES

Mark	No.	Description	Parts No.
	S610		DSG1016

FM/AM TUNER MODULE

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC6201		LA1836M
	IC6202		LM7001J
	Q6102		2SC2223
	Q6203		2SC2235
	Q6202		2SC2712
	Q6103, Q6214		2SC2714
	Q6201		2SK208
	Q6104		2SK302
	Q6101		3SK194
	Q6204		XDA124EK
	Q6217		XDC124EK
	D6101, D6102		1T33

COILS AND FILTERS

Mark	No.	Description	Parts No.
	L6104		ATC1003
	L6101		ATC1020
	L6102		ATC1021
	T6101		ATE−063
	L6207 (10.7MHZ)		ATE1013
	F6204 (SFE10.7MA8)		ATF−107
	F6203 (SFE10.7MS3G)		ATF−119
	F6101		ATF−155
	F6202 (450KHZ)		ATF1145
	L6103		ATH1043
	L6202, L6203, L6208		LCTA2R2J3225

CAPACITORS

Mark	No.	Description	Parts No.
	C6202, C6234, C6236 (1μ/16V)		ACG1051
	C6235 (0.47/25V)		ACG1052
	C6107		CCSCH010C50
	C6229		CCSCH821J50
	C6110		CCSQCH020C50
	C6101		CCSQCH050C50
	C6108, C6203, C6268		CCSQCH101J50
	C6111, C6116, C6208, C6221, C6222		CCSQCH150J50
	C6115		CCSQCH330J50
	C6114		CCSQRH080D50
	C6113		CCSQRH180J50
	C6105		CCSQTH150J50
	C6261		CEAS010M50
	C6224, C6231, C6233, C6246, C6262		CEAS100M50
	C6216, C6217		CEAS330M16
	C6219		CEAS470M10
	C6243−C6245		CEAS470M16
	C6227		CEAS470M25
	C6238		CEJA100M16
	C6249, C6250		CEJA4R7M35
	C6215		CFTXA103J50
	C6214		CFTXA224J50
	C6103, C6106, C6112, C6204		CKSQYB102K50
	C6102, C6109, C6117, C6210, C6264		CKSQYB103K50
	C6213		CKSQYB223K50
	C6230		CKSQYB333K50
	C6228, C6252		CKSQYB472K50
	C6209, C6237, C6265, C6267		CKSQYB473K50
	C6212, C6218		CKSQYF103Z50
	C6220, C6226, C6239, C6242, C6255		CKSQYF223Z50
	C6225, C6241, C6266		CKSQYF473Z50
	C6232		CKSYB333K50
	C6251		CKSYB472K50
	C6223		CKSYF103Z50
	C6263		CKSYF473Z50

RESISTORS

Mark	No.	Description	Parts No.
	VR6201 (10kΩ)		ACP1043
	VR6202		VRTB6VS223
	R6299, R6300		RD1/8PM102J
	R6113, R6116, R6118, R6268−R6271		RS1/8S000J
	R6275, R6276, R6278, R6283, R6284		RS1/8S000J
	R6290, R6293, R6294, R6297		RS1/8S000J
	R6243, R6244		RS1/8S101J
	R6211		RS1/8S103J
	R6237		RS1/8S182J
	R6209		RS1/8S221J
	R6239		RS1/8S332J
	R6101		RS1/8S470J
		Other Resistors	RS1/10S□□□J

OTHERS

Mark	No.	Description	Parts No.
	BN6201	TERMINAL 4−P	AKA1016
	X6203	CRYSTAL RESONATOR	ASS1042
	X6201	CRYSTAL RESONATOR	ASS1066
	X6202	CERAMIC RESONATOR	ATF1027
		AM RF TUNING BLOCK	AXX1041

FRONT ASSY FOR 100W

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC7501		UPC4570G2
	IC7701, IC7702		XRA4558F−P
	Q7507, Q7508		2SA1182
	Q7601		2SA1255
	Q7501, Q7502		2SC2240
	Q7605, Q7606, Q7703		2SC2712
	Q7505, Q7506		2SC2859
	Q7603		2SC3138
	Q7704		XDC143EK
	D7505, D7506, D7517, D7518		1SS181
	D7503, D7504, D7516		1SS184
	D7521−D7524		1SS244
	D7519, D7520, D7525, D7526, D7531		HSS104−02
	D7533, D7701−D7704, D7707		HSS104−02
	D7710−D7713		HSS104−02
	D7507−D7510		RD3.3ESB2

CAPACITORS

Mark	No.	Description	Parts No.
	C7703 (1/16V)		ACG1051
	C7523, C7524 (10/35V)		ACH1150
	C7509, C7510 (47/16V)		ACH1151
	C7539, C7540 (22/16V)		ACH1248
	C7519−C7522, C7545−C7552		CCSQCH101J50
	C7525−C7528		CCSQCH271J50
	C7503, C7504		CCSQCH331J50
	C7541, C7542		CCSQCH470J50
	C7529−C7532		CKSQYB333K50
	C7543, C7544		CKSQYB472K50
	C7602		CKSQYF103Z50
	C7601, C7603, C7702		CKSQYF104Z50
	C7537		CKSQYF473Z50

RESISTORS

Mark	No.	Description	Parts No.
	VR7701 (1kΩ)		ACP1076
	R7519, R7520 (630kΩ)		ACN1106
	R7515, R7516 (1.8kΩ)		ACN1107
	R7541, R7542		RD1/4PMF100J
	R7547−R7550		RS1/10S2200F
	R7709		RS1/10S39R0F
	R7710		RS1/10S56R0F
	R7708		RS1/10S7500F
	R7753		RS1/8S000J
	R7537−R7540		RS1/8S100J
	R7551, R7552		RD1/8PM333J
	R7553		RS1/8S101J
	R7543, R7544		RS1/8S7R5J
	Other Resistors		RS1/10S□□□J

REAR, PWR, PRTEC ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC7101		UPC4570G2
	Q7107, Q7108, Q7208, Q7215, Q7219		2SA1162
	Q7213		2SA1182
	Q7109, Q7110		2SB1115
	Q7301, Q7302		2SC1815
	Q7101, Q7102		2SC2240
	Q7105, Q7106, Q7205−Q7207, Q7209		2SC2712
	Q7212, Q7214, Q7218, Q7220, Q7221		2SC2712
	Q7216		2SC2859
	Q7211, Q7217		2SC3138
	Q7103, Q7104		2SD1615
	Q7210, Q7222		XDA124EK
	D7113, D7114		1SS181
	D7111, D7112		1SS184
	D7103−D7106, D7201, D7205		HSS104−02
	D7204, D7206		HZS6C3L
	D7203		HZS9A2L
	D7107−D7110		RD2.2ESB2

CAPACITORS

Mark	No.	Description	Parts No.
	C7402, C7406, C7408 (0.082/25V)		ACG1050
	C7401, C7405, C7407 (0.33/50V)		ACG1053
	C7123, C7124, C7212 (1/50V)		ACH1056
	C7409 (10/35V)		ACH1150
	C7109, C7110, C7205, C7207, C7208 (47/16V)		ACH1151
	C7140, C7141		ACH1248
	C7119−C7122		CCSQCH101J50
	C7133−C7136		CCSQCH221J50
	C7125−C7128		CCSQCH271J50
	C7103, C7104		CCSQCH331J50
	C7142, C7143		CCSQCH470J50
	C7301		CKSQYB332K50
	C7129−C7132		CKSQYB333K50
	C7213, C7214		CKSQYF103Z50
	C7206, C7404		CKSQYF104Z50
	C7137, C7138		CKSQYF472Z50
	C7139		CKSQYF473Z50

RESISTORS

Mark	No.	Description	Parts No.
	R7403, R7404 (1.0Ω)		ACN1104
	R7119, R7120		ACN1105
	R7115, R7116 (1.8kΩ)		ACN1107
	R7137−R7140		RS1/10S0100F
	R7303		RS1/10S1002F
	R7151, R7152		RS1/10S333J
	R7147−R7150		RS1/10S2200F
	R7304		RS1/10S8200F
	R7141−R7144		RS1/8S100J
	R7153		RS1/8S101J
	Other Resistors		RS1/10S□□□J

OTHERS

Mark	No.	Description	Parts No.
	CN7101	CONNECTOR (12P)	KPE12

OTHER ELECTRICAL PARTS

FRONT ASSY FOR 100W

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC7404		MC7805CT
	IC7401, IC7403		MC7812CT
	IC7402		NJM7912A
⚠	Q7111, Q7112		2SB1274
⚠	Q7113, Q7114		2SD1913

REAR, PWR, PRTEC ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
⚠	Q7511, Q7512		2SA1264N
	Q7509, Q7510		2SA1837
⚠	Q7513, Q7514		2SC3181N
	Q7503, Q7504		2SC4793

OTHERS

Mark	No.	Description	Parts No.
	POWER MOD. PCB		ANP1708
	FAN MOTOR		AXM1019

DECK UNIT

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC4431		CXA1330S
	IC4901		M66320FP
	IC4202		MC14066BF
	IC4101, IC4151, IC4301		NJM4558M−D
	Q4111, Q4113, Q4161, Q4352		2SA1515
	Q4356		2SC2240
	Q4101, Q4102, Q4151, Q4152, Q4203−Q4206, Q4301, Q4302, Q4305, Q4306, Q4451−Q4454		2SC2458
	Q4355		2SC2712
	Q4353, Q4354		2SC3377
	Q4307, Q4308		2SK373
	Q4303, Q4432, Q4901		XDA124ES
	Q4208		XDA143ES
	Q4112, Q4114, Q4155, Q4162, Q4357, Q4431, Q4433, Q4434		XDC124ES
	Q4207, Q4351		XDC143ES
	D4111, D4161, D4201, D4202, D4301−D4306, D4451, D4452, D4901−D4906		HSS104−02

COILS AND FILTERS

Mark	No.	Description	Parts No.
	F4431, F4432		ATF1064
	T4351		ATX−043
	L4301, L4302		LTA272J
	L4303, L4304		LTA822J

Mark	No. Description	Parts No.
	CAPACITORS	
	C4361 (2000p/630V)	ACE1020
	C4319, C4320	CCDSL271K500
	C4323, C4324	CCSQCH100D50
	C4902	CCSQCH101J50
	C4353	CCSQCH221J50
	C4109, C4110, C4159, C4160	CCSQCH471J50
	C4151, C4152	CCSQCH561J50
	C4101, C4102, C4321, C4322, C4355	CCSQCH681J50
	C4303, C4304, C4451, C4452	CEAS010M50
	C4359, C4360, C4364, C4403, C4404, C4443–C4446, C4454	CEAS100M50
	C4365, C4366, C4453	CEAS220M16
	C4301, C4302, C4315, C4316	CEAS2R2M50
	C4103, C4104, C4153, C4154, C4309, C4310, C4317, C4318	CEAS330M16
	C4357	CEAS3R3M50
	C4107, C4108, C4157, C4158	CEAS470M10
	C4351	CEAS470M16
	C4207, C4208	CEAS4R7M50
	C4437, C4438	CEASR22M50
	C4439–C4442	CEASR33M50
	C4363	CKCYB222K500
	C4352, C4354	CKSQYB103K50
	C4313, C4314	CKSQYB222K50
	C4307, C4308	CKSQYB273K50
	C4305, C4306	CKSQYB473K50
	C4901	CKSQYF473Z50
	C4358	CQMA123K250
	C4356	CQMA153J50
	C4433–C4436	CQMA222J50
	C4362	CQMA562K400
	C4105, C4106, C4155, C4156	CQMA682J50
	C4311, C4312	CQMA823J50
	C4998, C4999	CQMA104J50
	RESISTORS	
	VR4111	VRTP6HS103
	VR4201–VR4204	VRTP6HS203
	VR4351, VR4352	VRTP6HS204
	VR4301, VR4302	VRTP6HS502
	R4353	RD1/2PM560J
	R4444	RD1/8PM103J
	R4121	RD1/8PM153J
	R4361, R4362	RD1/8PM333J
	R4401, R4402	RD1/8PM473J
	R4357	RD1/8PM6R8J
	R4113, R4114, R4163, R4164, R4323, R4324	RD1/8PM820J
	Other Resistors	RS1/10S□□□J
	OTHERS	
	CN24 3P SOCKET	EKS1018
	CN25 5P SOCKET	EKS1019
	CN16 12P JUMPER CONNECTOR	KPE12
	CN3002 13P JUMPER CONNECTOR	KPE13

(1)–3. FOR XR–P740M/YPW, XR–P740/SD, XR–P640M/SD, YPW AND XR–P640/SD AF CD ASSY

AWZ7281, AWZ7091, AWZ7089 and AWZ7095 have the same construction except for the following :

Mark	Symbol & Description	Part No.				Remarks
		AWZ7095	AWZ7281	AWZ7091	AWZ7089	
	IC2203	NJM4558M–D	NJM4558M–D	···············	···············	
	D1010	HZS7BL	RD7.5ESB	HZS7BL	HZS7BL	
	R2217, R2218, R3469, R3470	RS1/10S472J	RS1/10S472J	···············	···············	
	R2219, R2220	RS1/10S104J	RS1/10S104J	···············	···············	
	R3411, R3412	RS1/10S911J	RS1/10S911J	···············	···············	
	R5003, R5009	···············	···············	RS1/10S223J	RS1/10S223J	
	R5011, R5012	···············	···············	RS1/10S000J	RS1/10S000J	
	CN8203	4–173981–4	···············	4–173981–4	···············	
	CN8203	···············	VKN1052	···············	VKN1052	
	CN8204	52147–0610	···············	52147–0610	···············	
	PCB binder .	VEF1008	···············	VEF1008	···············	

VR ASSY

AWZ7099 and AWZ7282 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ7282	AWZ7099	
	C1501, C1502	CEYA2R2M50	CEAS2R2M50	
	VR301	ACX1088	ACX1092	

CD DECK SW ASSY

AWZ7124 and AWZ7125 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ7125	AWZ7124	
	Q1701−Q1706	2SA1048	…………………	
	D1709−D1714	AEL1132	…………………	
	S1828, S1830−S1835	ASG1034	…………………	
	S1836	…………………	ASG1034	
	R1705−R1710, R1729−R1734	RS1/10S301J	…………………	
	R1711−R1716	RS1/10S273J	…………………	
	R1717−R1722	RS1/10S272J	…………………	

TRANS PRIMARY ASSY

AWZ7127 and AWZ7130 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ7130	AWZ7127	
	L1101	ATF−151	…………………	
	C1102 (0.01/400)	ACG1003	…………………	

DISPLAY ASSY

AWZ7214, AWZ7118, AWZ7116 and AWZ7215 have the same construction except for the following :

Mark	Symbol & Description	Part No.				Remarks
		AWZ7215	AWZ7214	AWZ7118	AWZ7116	
	IC1901	PD4493A	PD4492A	PD4493A	PD4492A	
	R1723−R1728	RS1/10S562J	…………………	RS1/10S562J	…………………	

ADDON DISPLAY ASSY

AWZ7139 and AWZ7141 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ7141	AWZ7139	
	R3968	....	RS1/10S473J	
	R3969	RS1/10S473J	....	
	R4030−R4034	RD1/8PM102J	....	

DOL SURR ASSY

Mark	No.	Description	Parts No.
SEMICONDUCTORS			
	IC3404		LA2730
	IC3403		M50198P
	IC3405		MC14066BF
	IC3401, IC3402, IC3407		NJM4558M−D
	IC3406		TC9154AP
	Q3402		2SC1740S
	Q3405		2SC2458
	Q3404		RN1201
	Q3403		RN2201
	Q3401		RN2203
	D3410		1SS226
	D3401−D3404, D3406−D3408		HSS104−02
	D3409		RD5.1ESB
COILS AND FILTERS			
	L3401		LAU5R6K
CAPACITORS			
	C3414		CEANP100M35
	C3421		CEAS010M50
	C3404, C3417, C3424, C3427, C3431		CEAS100M50
	C3426		CEAS101M10
	C3425		CEAS220M16
	C3401, C3402, C3430, C3432		CEAS2R2M50
	C3434−C3436		CEAS2R2M50
	C3405, C3409		CEAS470M16
	C3418		CEAS470M25
	C3419		CEASR33M50
	C3416		CFTYA103J50
	C3408, C3413, C3420		CFTYA104J50
	C3422, C3429		CFTYA333J50
	C3410, C3411		CFTYA474J50
	C3437		CKSQYB471K50
	C3440, C3441		CKSQYF104Z50
	C3403, C3442		CKSQYF473Z50
	C3423		CQMA153J50
	C3428		CQMA472J50
	C3407, C3415		CQMA561J50
	C3406, C3412		CQMA562J50

Mark	No.	Description	Parts No.
RESISTORS			
	VR3401		ACP1044
	R3451		RD1/2PM271J
	R3422		RD1/4PM390J
	R3440		RD1/8PM102J
	R3452−R3454		RD1/8PM222J
		Other Resistors	RS1/10S□□□J
OTHERS			
		PIN JACK (2P)	AKB1164
	X3401	CERAMIC OSCILLATOR	ASS1016

(2) FOR XR−P340M AND XR−P340

(2)−1. LIST OF WHOLE PCB ASSEMBLIES

Mark	Symbol & Description	Part No.						Remarks
		XR−P340M				XR−P340		
		KU	KC	SD	YPW	SD	YPW	
	MAIN assy	AWK7034	AWK7034	AWK7082	AWK7082	AWK7081	AWK7081	
	├─ AF CD assy	AWZ7088	AWZ7088	AWZ7287	AWZ7287	AWZ7286	AWZ7286	
	├─ H. P assy	AWZ7103	AWZ7103	AWZ7103	AWZ7103	AWZ7103	AWZ7103	
	├─ SECONDRY TRANS assy	AWZ7107	AWZ7107	AWZ7107	AWZ7107	AWZ7107	AWZ7107	
	└─ VR assy	AWZ7270	AWZ7270	AWZ7280	AWZ7280	AWZ7280	AWZ7280	
	COMPLEX assy	AWM7027	AWM7027	AWM7028	AWM7029	AWM7020	AWM7021	
	├─ CD DECK SW assy	AWZ7125	AWZ7125	AWZ7125	AWZ7125	AWZ7124	AWZ7124	
	├─ TRANS PRIMARY assy	AWZ7131	AWZ7131	AWZ7130	AWZ7127	AWZ7130	AWZ7127	
	└─ DISPLAY assy	AWZ7113	AWZ7113	AWZ7114	AWZ7114	AWZ7110	AWZ7110	
	MULTI MECHA assy	AXA7006	AXA7006	AXA7006	AXA7006	…………	…………	
NSP	├─ LOADING BOARD assy	AWZ7207	AWZ7207	AWZ7207	AWZ7207	…………	…………	
NSP	├─ MOTOR BOARD assy	AWZ7208	AWZ7208	AWZ7208	AWZ7208	…………	…………	
NSP	├─ SELECT BOARD assy	AWZ7209	AWZ7209	AWZ7209	AWZ7209	…………	…………	
NSP	└─ MECHANISM BOARD assy	PWX1192	PWX1192	PWX1192	PWX1192	…………	…………	
	SINGLE MECHA assy	…………	…………	…………	…………	AXA7004	AXA7004	
NSP	└─ MECHANISM BOARD assy	…………	…………	…………	…………	PWX1192	PWX1192	
	FM/AM TUNER MODULE	AXQ1012	AXQ1012	AXQ1012	AXQ1012	AXQ1012	AXQ1012	
	POWER MOD. F50	AXQ1018	AXQ1018	AXQ1018	AXQ1018	AXQ1018	AXQ1018	
	├─ FRONT ASSY FOR 50W	AWZ5390	AWZ5390	AWZ5390	AWZ5390	AWZ5390	AWZ5390	
	└─ REAR, PRTEC ASSY	AWZ5392	AWZ5392	AWZ5392	AWZ5392	AWZ5392	AWZ5392	
	CASSETTE MECHA MOD. B	EXK2430	EXK2410	EXK2410	EXK2410	EXK2410	EXK2410	
	└─ DECK unit	EWM1001	EWM1001	EWM1001	EWM1001	EWM1001	EWM1001	

(2)−2. FOR XR−P340M/KU

AF CD ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC8151		CXA1372Q
	IC8301		CXD2517Q
	IC1001		ICP−N70
	IC8201, IC8202 LA6520		
	IC2104		M66311FP
	IC2101		MC14052BF
	IC2201, IC2202, IC3301, IC3501, IC3601		NJM4558M−D
	IC8405		NJM4558M−D
	IC8402		TC7S04F
	IC2102		TC9162N
	IC8401		TC9268F
	Q1051, Q1053		2SA1048
	Q1002, Q1006, Q1040		2SA1515
	Q1005, Q106		2SB560
	Q1052, Q1403, Q9001, Q9002		2SC2458
	Q1003		2SC3377
	Q105		2SD438
	Q8401		2SK246
	Q1001, Q1007, Q1041		RN1201
	Q1004, Q9004		RN2201
	Q8402		RN2203
	D1001		D3SBA20 (A)
	D1021, D1022, D1027, D1031		HSS104−02
	D1153, D1154, D6901, D8301, D8401		HSS104−02
	D9001		HSS104−02

Mark	No.	Description	Parts No.
	D2201, D8211		HZS6CL
	D1010		HZS7BL
	D1002		RB152
	D1023		RD30ESB4
	D1151, D1152		RD5.1ESB
	D1011, D1012		RD5.6ESB2
	D1007, D1008, D1013−D1020		S5688G
	D1024, D1025, D1041−D1043		S5688G

CAPACITORS

Mark	No.	Description	Parts No.
	C1009 (0.01/150V)		ACG1005
	C1001, C1002 (5600/56V)		ACH1211
	C2255, C8173, C8174		CCSQCH101J50
	C8403, C8404		CCSQCH150J50
	C3303, C3304		CCSQCH220J50
	C2204		CCSQCH331J50
	C8435−C8438		CCSQCH390J50
	C8429, C8430		CCSQCH560J50
	C8433, C8434		CEANP2R2M50
	C1019		CEAS010M50
	C1016		CEAS101M10
	C1011, C1012		CEAS101M16
	C1018		CEAS101M63
	C1007, C1225		CEAS220M50
	C1017		CEAS221M35
	C1004		CEAS222M35
	C8216, C8217, C8302		CEAS330M16
	C8175, C8176		CEAS331M16
	C1003		CEAS332M35
	C1224		CEAS3R3M50
	C1013, C1014		CEAS470M16
	C2251, C2252		CEAS470M50
	C3301, C3302, C3501, C8160, C8162		CEAS4R7M50
	C2503, C2504		CEASR15M50
	C3502, C3601, C8309		CEASR47M50
	C8164, C8167, C8169, C8212		CKSQYB103K50
	C8306, C8441, C8442		CKSQYB152K50
	C3309, C3310, C8155		CKSQYB182K50
	C3503		CKSQYB223K50
	C3305, C3306		CKSQYB273K50
	C3307, C3308, C8170		CKSQYB332K50
	C8156, C8168		CKSQYB333K50
	C2201−C2203		CKSQYB471K50
	C8171, C8172		CKSQYB472K50
	C8307		CKSQYB473K50
	C3311, C3312, C8157, C8202, C8203		CKSQYF103Z50
	C8205−C8207		CKSQYF103Z50
	C1301−C1304, C2253, C2257		CKSQYF104Z50
	C8158, C8159, C8161, C8163, C8301		CKSQYF104Z50
	C8304, C8308, C8361, C8414, C8415		CKSQYF104Z50
	C8431, C8432, C8461, C8462		CKSQYF104Z50

RESISTORS

Mark	No.	Description	Parts No.
	VR8151, VR8152 (22kΩ)		ACP1057
	R2125		RA11T103J
	R1159, R1160		RD1/2PM151J
	R1064, R1153, R1157		RD1/4PM102J
	R1041		RD1/4PM222J
	R1002		RD1/4PM272J
	R1020		RD1/4PM432J
	R1003		RD1/4PM472J
	R1019		RD1/4PM511J
	R1301, R1302		RD1/4PMF6R8J
	R1031, R2101, R2102, R2105−R2107		RD1/8PM102J
	R2111−R2113, R2117, R2129, R9007		RD1/8PM102J
	R1040, R1063, R1154, R1158		RD1/8PM103J
	R8368		RD1/8PM105J
	R1032		RD1/8PM152J
	R1051		RD1/8PM331J
	R3502		RD1/8PM433J
	R1052		RD1/8PM471J
	R1151, R2136		RD1/8PM472J
	R2114		RD1/8PM473J
	R1013		RD1/8PM562J
	R1026		RD1/8PM823J
	R2121, R2122		RD1/8PM912J
	R1007, R1017		RS2LMFR22J
	Other Resistors		RS1/10S□□□J

OTHERS

Mark	No.	Description	Parts No.
	CN8131	CONNECTOR	12FMZ−ABT
	CN8204	6P JUMPER CONNECTOR	52147−0610
	CN2102	PIN JACK 2P (SP OUT)	AKB1146
	CN2101	PIN JACK 2P (VIDEO/AUX)	AKB1171
		SPEAKER TERMINAL 4−P	AKE1026
	CN1	36P SOCKET	AKP1105
	CN10	JUMPER CONNECTOR	KPC6
	X8401	XTAL RES (OSC)	PSS1008
		PCB BINDER	VEF1008
	CN8202	CONNECTER	VKN1051
	CN8203	CONNECTOR 4P	4−173981−4

H. P ASSY

RESISTORS

Mark	No.	Description	Parts No.
	R1201, R1202		RS2LMF331J
	Other Resistors		RS1/10S□□□J

OTHERS

Mark	No.	Description	Parts No.
	CN1201	JACK	AKN1029

SECONDRY TRANS ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC1006−IC1009		ICP−N70

VR ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC1501		NJM4558M−D
	IC1551		TA8409S

CAPACITORS

Mark	No.	Description	Parts No.
	C1554		CEAS101M16
	C1501−C1504		CEAS2R2M50
	C1557, C1558		CKSQYB273K50
	C1509, C1510, C1555, C1556		CKSQYB473K50
	C1551−C1553		CKSQYF104Z50

RESISTORS

Mark	No.	Description	Parts No.
	VR301	(100K−3B*2)	ACX1089
	Other Resistors		RS1/10S□□□J

XR-P740M, XR-P640M, XR-P340M
XR-P740, XR-P640, XR-P340

DISPLAY ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC1951		M66311FP
	IC2501, IC3701–IC3703		NJM4558M–D
	IC1901		PD4493A
	Q1901		2SC2458
	Q1902		RN1201
	Q1707		RN2201
	D1701–D1705		AEL1118
	D1801–D1815, D1819, D1820, D1901		HSS104–02
	D1903, D1905, D1906, D3701–D3705		HSS104–02
	D1951, D1953		HZS6CL
	D1904		HZS7AL

COILS AND FILTERS

Mark	No.	Description	Parts No.
	L1901		LAU220J

SWITCHES

Mark	No.	Description	Parts No.
	S1801–S1815		ASG1034
	S1901		ASX1021

CAPACITORS

Mark	No.	Description	Parts No.
	C1903		ACH1246
	C1952		CCSQCH101J50
	C2504		CCSQCH221J50
	C1907		CEJA010M50
	C1910, C2503, C2505		CEJA100M50
	C1905		CEJA221M10
	C1902		CEJA470M16
	C2502		CEJA4R7M50
	C1908		CFTYA224J50
	C1915, C1916		CKSQYB102K50
	C1954		CKSQYB103K50
	C2501		CKSQYB122K50
	C3710, C3711		CKSQYB152K50
	C3704, C3705		CKSQYB153K50
	C3713, C3714		CKSQYB471K50
	C3707, C3708		CKSQYB472K50
	C2507, C3701, C3702		CKSQYB473K50
	C2506		CKSQYB682K50
	C1909		CKSQYF102Z50
	C1955		CKSQYF103Z50
	C1901, C1904, C1906, C1911–C1914		CKSQYF473Z50
	C2508, C2509, C3703, C3706, C3709		CKSQYF473Z50
	C3712, C3715		CKSQYF473Z50

RESISTORS

Mark	No.	Description	Parts No.
	VR2501	(10K–B)	ACS1104
	R1701		RD1/8PM181J
	R1801–R1804		RD1/8PM223J
	R1941		RD1/8PM472J
	R1919		RD1/8PM473J
	R1935, R1938, R1939		RD1/8PM561J
	Other Resistors		RS1/10S□□□J

OTHERS

Mark	No.	Description	Parts No.
	V1701	FL TUBE	AAV7002
		JACK	AKN1030
	CN1001	36P SOCKET	AKP1105
	X1901	CERAMIC RESONATOR	ASS1018
		REMOTE RECEIVER UNIT	AXX1023

CD DECK SW ASSY

CD DECK SW assy of XR–P340M/KU is the same as that of XR–P740M/SD.
Refer to "(1)–2. FOR XR–P740M/SD".

TRANS PRIMARY ASSY

CAPACITORS

Mark	No.	Description	Parts No.
	C1102	(0.01/400)	ACG1003

RESISTORS

Mark	No.	Description	Parts No.
	R1101	(2.2M, 1/2W)	ACN–208
	Other Resistors		RS1/10S□□□J

LOADING BOARD ASSY

LOADING BOARD assy of XR–P340M/KU is the same as that of XR–P740M/SD.
Refer to "(1)–2. FOR XR–P740M/SD".

MOTOR BOARD ASSY

MOTOR BOARD assy of XR–P340M/KU is the same as that of XR–P740M/SD.
Refer to "(1)–2. FOR XR–P740M/SD".

SELECT BOARD ASSY

SELECT BOARD assy of XR–P340M/KU is the same as that of XR–P740M/SD.
Refer to "(1)–2. FOR XR–P740M/SD".

MECHANISM BOARD ASSY

MECHANISM BOARD assy of XR–P340M/KU is the same as that of XR–P740M/SD.
Refer to "(1)–2. FOR XR–P740M/SD".

FM/AM TUNER MODULE

FM/AM TUNER MODULE of XR–P340M/KU is the same as that of XR–P740M/SD.
Refer to "(1)–2. FOR XR–P740M/SD".

FRONT ASSY FOR 50W

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC7501		UPC4570G2
	IC7701, IC7702 XRA4558F–P		
	Q7507, Q7508		2SA1182
	Q7601		2SA1255
	Q7517, Q7518		2SB1115
	Q7501, Q7502		2SC2240
	Q7605, Q7606, Q7703		2SC2712
	Q7505, Q7506		2SC2859
	Q7603		2SC3138
	Q7515, Q7516		2SD1615
	Q7704		XDC143EK
	D7505, D7506, D7517, D7518		1SS181
	D7503, D7504, D7516		1SS184
	D7521–D7524		1SS244
	D7519, D7520, D7525, D7526, D7531		HSS104–02

Mark	No.	Description	Parts No.
	D7533, D7701–D7704, D7707		HSS104–02
	D7710–D7713		HSS104–02
	D7507–D7510		RD3.3ESB2

CAPACITORS

Mark	No.	Description	Parts No.
	C7703 (1/16V)		ACG1051
	C7523, C7524 (10/35V)		ACH1150
	C7509, C7510 (47/16V)		ACH1151
	C7539, C7540 (22/16V)		ACH1248
	C7519–C7522, C7545–C7552		CCSQCH101J50
	C7525–C7528		CCSQCH271J50
	C7503, C7504		CCSQCH331J50
	C7541, C7542		CCSQCH470J50
	C7529–C7532		CKSQYB333K50
	C7543, C7544		CKSQYB472K50
	C7602		CKSQYF103Z50
	C7601, C7603, C7702		CKSQYF104Z50
	C7537		CKSQYF473Z50

RESISTORS

Mark	No.	Description	Parts No.
	VR7701 (1kΩ)		ACP1076
	R7519, R7520 (630kΩ)		ACN1106
	R7515, R7516 (1.8kΩ)		ACN1107
	R7541, R7542		RD1/4PMF100J
	R7547–R7550		RS1/10S2200F
	R7709		RS1/10S39R0F
	R7710		RS1/10S56R0F
	R7708		RS1/10S7500F
	R7753		RS1/8S000J
	R7537–R7540		RS1/8S100J
	R7551, R7552		RD1/8PM333J
	R7553		RS1/8S101J
	R7543, R7544		RS1/8S7R5J
	Other Resistors		RS1/10S□□□J

PWR, PRTEC ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	Q7208, Q7215, Q7219		2SA1162
	Q7213		2SA1182
	Q7301, Q7302		2SC1815
	Q7207, Q7209, Q7212, Q7214, Q7218		
	2SC2712		
	Q7220, Q7221		2SC2712
	Q7216		2SC2859
	Q7211, Q7217		2SC3138
	Q7210, Q7222		XDA124EK
	D7201, D7205		HSS104–02
	D7204, D7206		HZS6C3L
	D7203		HZS9A2L

CAPACITORS

Mark	No.	Description	Parts No.
	C7402, C7406, C7408 (0.082/25V)		ACG1050
	C7401, C7405, C7407 (0.33/50V)		ACG1053
	C7212 (1/50V)		ACH1056
	C7409 (10/35V)		ACH1150
	C7205, C7207, C7208 (47/16V)		ACH1151
	C7301		CKSQYB332K50
	C7213, C7214		CKSQYF103Z50
	C7206, C7404		CKSQYF104Z50

RESISTORS

Mark	No.	Description	Parts No.
	R7403, R7404 (1Ω)		ACN1104
	R7303		RS1/10S1002F
	R7304		RS1/10S8200F
	Other Resistors		RS1/10S□□□J

OTHERS

Mark	No.	Description	Parts No.
	CN7101	CONNECTOR (12P)	KPE12

OTHER ELECTRICAL PARTS

FRONT ASSY FOR 50W

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC7404		MC7805CT
	IC7401, IC7403		MC7812CT
	IC7402		NJM7912A

PWR, PRTEC ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	Q7511, Q7512		2SA1264N
	Q7513, Q7514		2SC3181N

OTHERS

Mark	No.	Description	Parts No.
		POWER MOD. PCB	ANP1708
		FAN MOTOR	AXM1019

DECK UNIT

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC4421		CXA1100P
	IC4901		M66320FP
	IC4202		MC14066BF
	IC4101, IC4151, IC4301		NJM4558M–D
	Q4111, Q4113, Q4161, Q4352		2SA1515
	Q4356		2SC2240
	Q4101, Q4102, Q4151, Q4152, Q4203–Q4206, Q4301, Q4302, Q4305, Q4306, Q4451–Q4454		2SC2458
	Q4355		2SC2712
	Q4353, Q4354		2SC3377
	Q4307, Q4308		2SK373
	Q4303, Q4901		XDA124ES
	Q4208		XDA143ES
	Q4112, Q4114, Q4155, Q4162, Q4357		XDC124ES
	Q4207, Q4351		XDC143ES
	D4111, D4161, D4201, D4202, D4301–D4306, D4451, D4452, D4901–D4906		HSS104–02

COILS AND FILTERS

Mark	No.	Description	Parts No.
	F4401, F4402		ATF1064
	T4351		ATX–043
	L4301, L4302		LTA272J
	L4303, L4304		LTA822J

CAPACITORS

Mark	No.	Description	Parts No.
	C4361 (2000P/630V)		ACE1020
	C4319, C4320		CCDSL271K500
	C4323, C4324		CCSQCH100D50
	C4902		CCSQCH101J50
	C4353		CCSQCH221J50

Mark	No. Description	Parts No.
	C4109, C4110, C4159, C4160	CCSQCH471J50
	C4151, C4152	CCSQCH561J50
	C4101, C4102, C4321, C4322, C4355	CCSQCH681J50
	C4303, C4304, C4451, C4452	CEAS010M50
	C4359, C4360, C4364, C4403−C4405, C4407, C4454	CEAS100M50
	C4401, C4408	CEAS101M16
	C4365, C4366, C4453	CEAS220M16
	C4301, C4302, C4315, C4316	CEAS2R2M50
	C4103, C4104, C4153, C4154, C4309, C4310, C4317, C4318	CEAS330M16
	C4357	CEAS3R3M50
	C4107, C4108, C4157, C4158	CEAS470M10
	C4351	CEAS470M16
	C4207, C4208	CEAS4R7M50
	C4402, C4406	CEASR22M50
	C4363	CKCYB222K500
	C4352, C4354	CKSQYB103K50
	C4313, C4314	CKSQYB222K50
	C4307, C4308	CKSQYB273K50
	C4305, C4306	CKSQYB473K50
	C4901	CKSQYF473Z50
	C4358	CQMA123K250
	C4356	CQMA153J50
	C4362	CQMA562K400

Mark	No. Description	Parts No.
	C4105, C4106	CQMA682J50
	C4155, C4156	CQMA682J50
	C4311, C4312	CQMA823J50

RESISTORS

Mark	No. Description	Parts No.
	VR4111	VRTP6HS103
	VR4201−VR4204	VRTP6HS203
	VR4351, VR4352	VRTP6HS204
	VR4301, VR4302	VRTP6HS502
	R4353	RD1/2PM560J
	R4121	RD1/8PM153J
	R4401, R4402	RD1/8PM242J
	R4361, R4362	RD1/8PM333J
	R4357	RD1/8PM6R8J
	R4113, R4114, R4163, R4164, R4323, R4324	RD1/8PM820J
	Other Resistors	RS1/10S□□□J

OTHERS

Mark	No. Description	Parts No.
	CN24 3P SOCKET	EKS1018
	CN25 5P SOCKET	EKS1019
	CN16 12P JUMPER CONNECTOR	KPE12
	CN3002 13P JUMPER CONNECTOR	KPE13

(2)−3. FOR XR−P340M/KC, SD, YPW, XR−P340/SD AND YPW

AF CD ASSY

AWZ7287, AWZ7286 and AWZ7088 have the same construction except for the following :

Mark	Symbol & Description	Part No.			Remarks
		AWZ7088	AWZ7287	AWZ7286	
	D1010	HZS7BL	RD7.5ESB	RD7.5ESB	
	D1032, D1033	....	HSS104−02	HSS104−02	
	D2201, D8211	HZS6CL	RD6.2ESB	RD6.2ESB	
	D1996, D1997	....	S5688G	S5688G	
	C1001, C1002 (5600/56)	ACH1211	....	....	
	C1001, C1002 (3300/50)	....	ACH1066	ACH1066	
	C1010 (0.01/150)	....	ACG1005	ACG1005	
	R1223	RS1/10S303J	RS1/10S333J	RS1/10S333J	
	R1997	....	RD1/8PM100J	RD1/8PM100J	
	R1998	....	RS1LMF220J	RS1LMF220J	
	R1999	....	RS3LMF6R8J	RS3LMF6R8J	
	R3503	RS1/10S272J	....	RS1/10S272J	
	CN8203	4−173981−4	4−173981−4	....	
	CN8203	....	....	VKN1052	
	CN8204	52147−0610	52147−0610	....	
	PCB binder	VEF1008	VEF1008	....	

VR ASSY

AWZ7280 and AWZ7270 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ7270	AWZ7280	
	C1501, C1502	CEAS2R2M50	CEYA2R2M50	
	C1557, C1558	CKSQYB273K50	CKSQYB393K50	
	R1555–R1558	RS1/10S823J	RS1/10S104J	

CD DECK SW ASSY

CD DECK SW assemblies of XR–P340M and XR–P340 are the same as those of XR–P740M and XR–P740. Refer to "(1)–2. FOR XR–P740M/SD".

TRANS PRIMARY ASSY

AWZ7130, AWZ7127 and AWZ7131 have the same construction except for the following :

Mark	Symbol & Description	Part No.			Remarks
		AWZ7131	AWZ7130	AWZ7127	
	L1101	....	ATF–151	....	
	C1102 (0.01/400)	ACG1003	ACG1003	....	
	R1101 (2.2M, 1/2W)	ACN–208	....	....	

DISPLAY ASSY

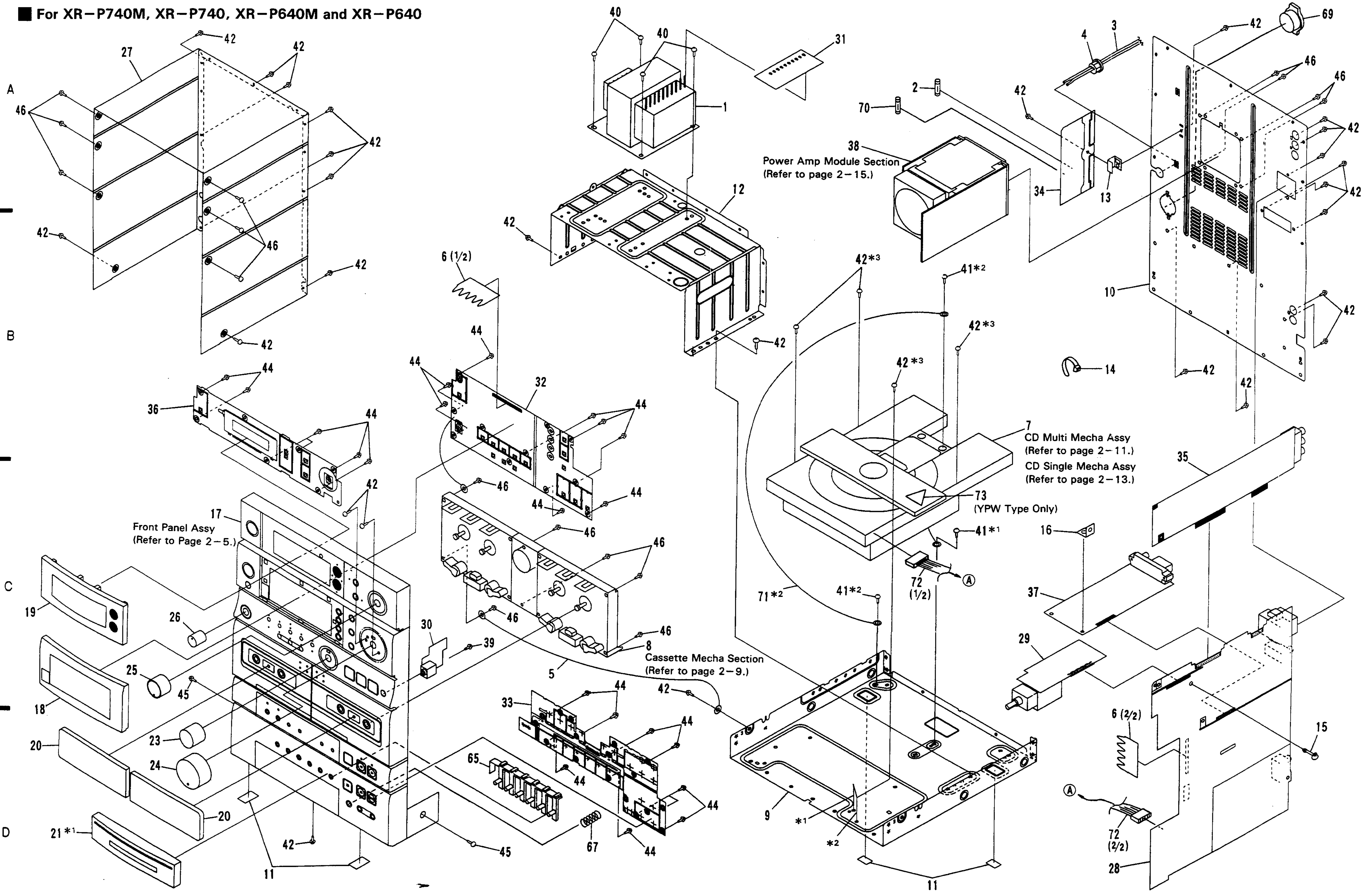
AWZ7114, AWZ7110 and AWZ7113 have the same construction except for the following :

Mark	Symbol & Description	Part No.			Remarks
		AWZ7113	AWZ7114	AWZ7110	
	IC1901	PD4493A	PD4493A	PD4492A	
	D1820	HSS104–02	....	....	
	R1723–R1728	RS1/10S562J	RS1/10S562J	....	

(2) EXPLODED VIEWS

(2)−1. EXTERIOR

■ For XR−P740M, XR−P740, XR−P640M and XR−P640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41 *1
41 *2
42
42 *3
44
45
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6 (1/2)
6 (2/2)
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71 *2
72 (1/2)
72 (2/2)
73
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*2

Power Amp Module Section (Refer to page 2−15.)

CD Multi Mecha Assy (Refer to page 2−11.)

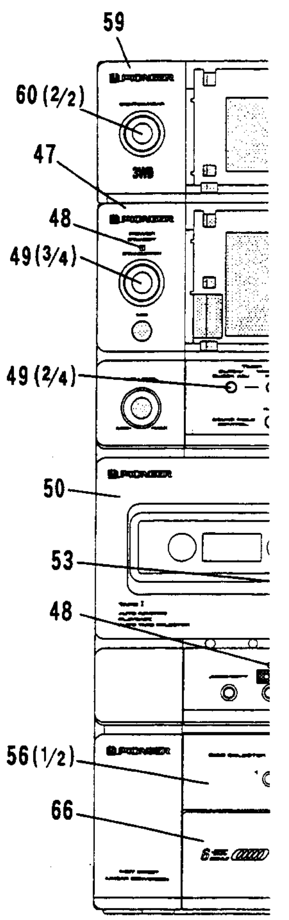
CD Single Mecha Assy (Refer to page 2−13.)

(YPW Type Only)

Front Panel Assy (Refer to Page 2−5.)

Cassette Mecha Section (Refer to page 2−9.)

Front Panel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60 (2/2)
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49 (3/4)
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56 (1/2)
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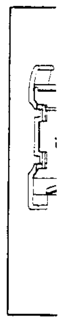
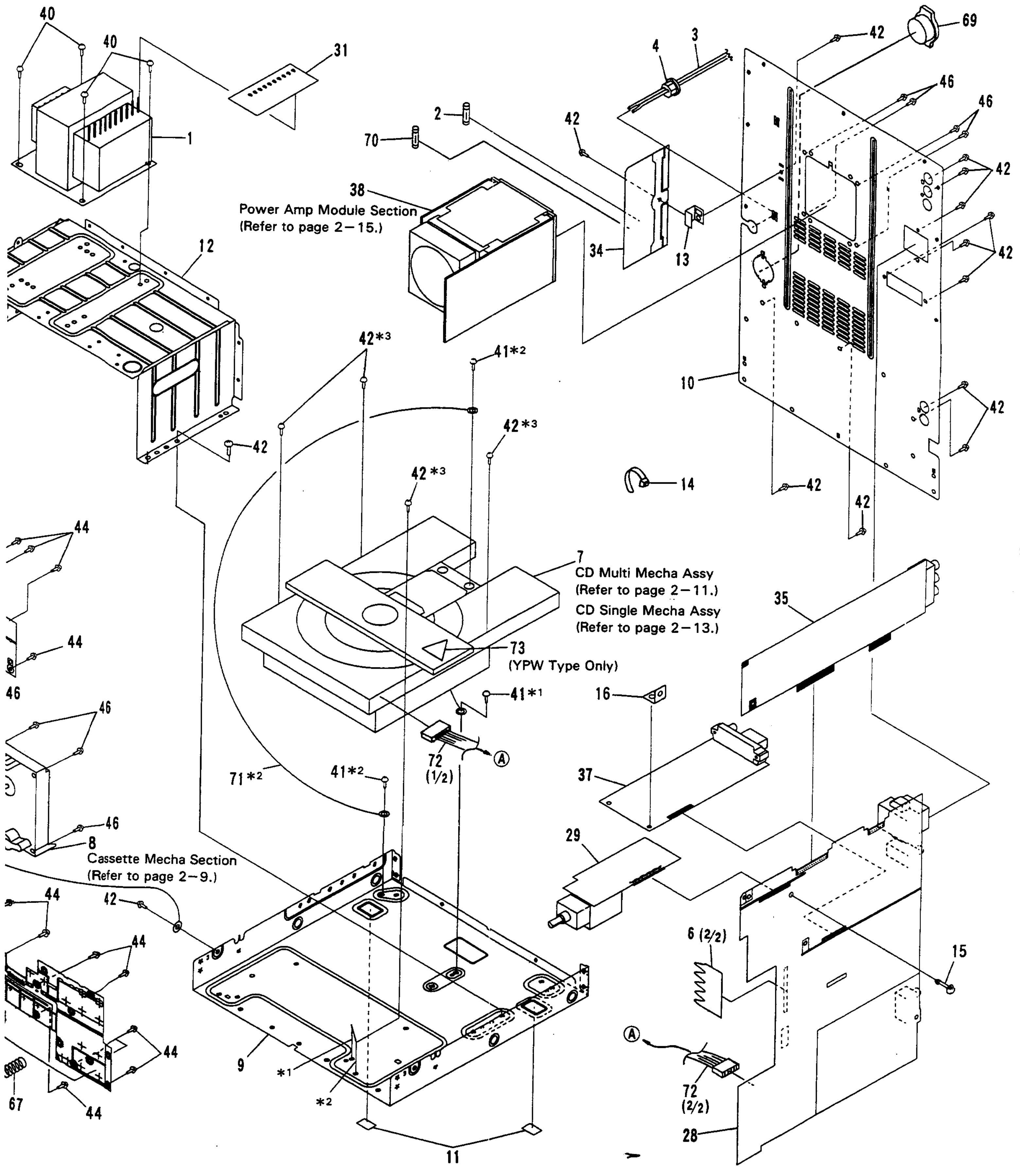


N(

NOTE : Screws adjacent to ▼ mark on the product are used for disassembly.

*1: XR−P740 and XR−P640 Only
*2: XR−P740M and XR−P640M Only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41*2
42*3
42*3
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73
41*1
16
72
(1/2)
Ⓐ
71*2
41*2
37
46
8
29
44
42
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15
6 (2/2)
Ⓐ
44
9
*1
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72
(2/2)
67
44
28
11

Power Amp Module Section (Refer to page 2−15.)

CD Multi Mecha Assy (Refer to page 2−11.)
CD Single Mecha Assy (Refer to page 2−13.)

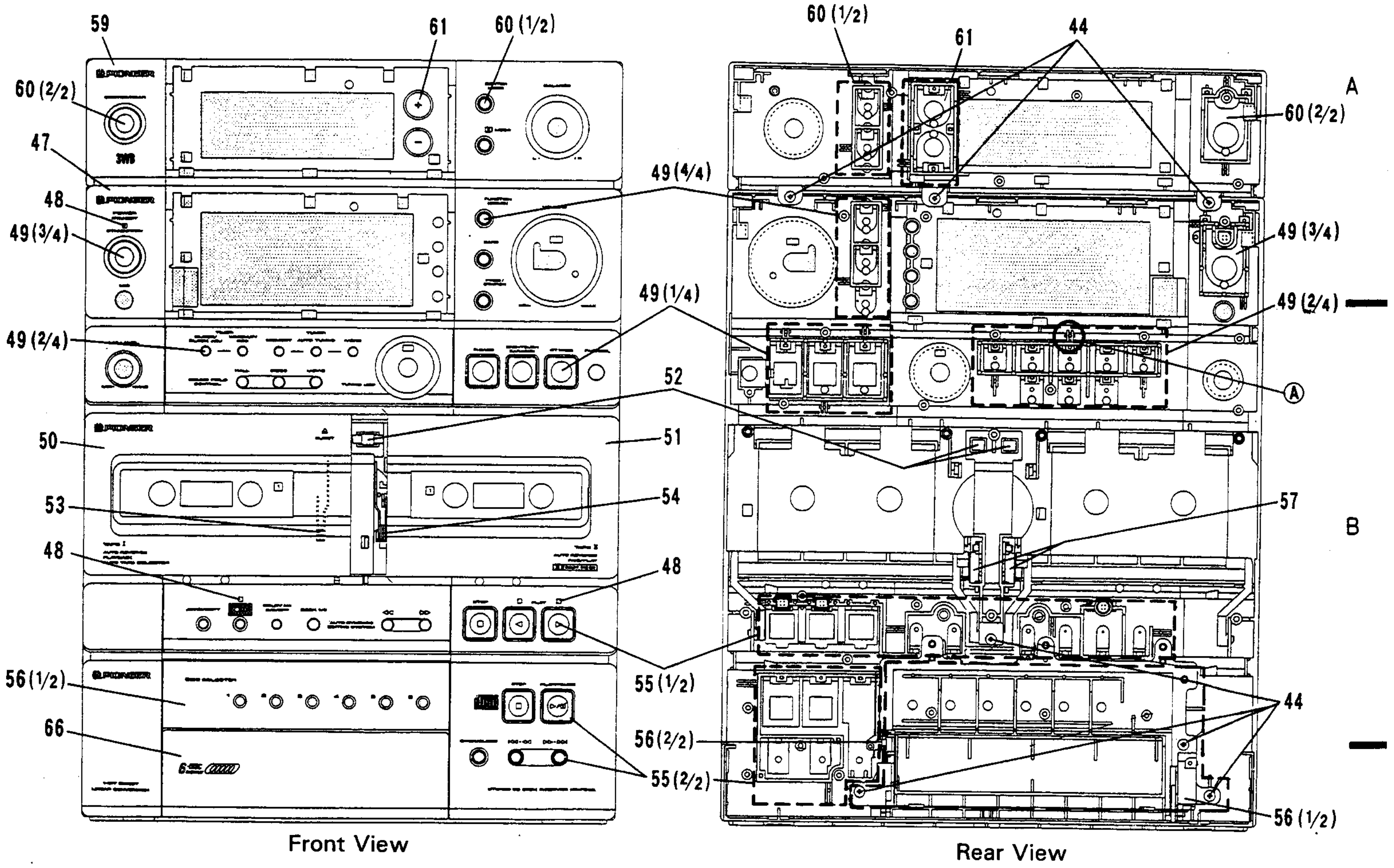
(YPW Type Only)

Cassette Mecha Section (Refer to page 2−9.)

**ıdjacent to ▼ mark on the product
for disassembly.**

∗1: XR−P740 and XR−P640 Only
∗2: XR−P740M and XR−P640M Only

Front Panel Assy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60 (1/2)
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55 (1/2)
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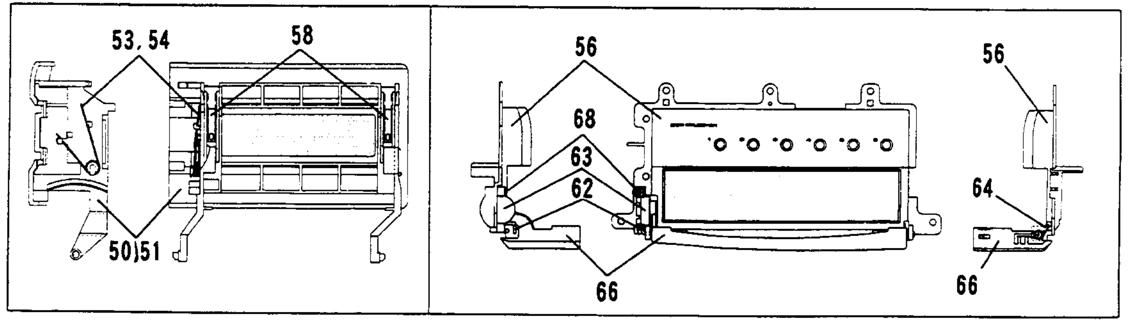
60 (1/2)
61
44
60 (2/2)
49 (3/4)
49 (2/4)
Ⓐ
57
44
56 (1/2)

Front View   Rear View

- Preparation Prior to Assembling Door−LR Assy.

After installing Door−L (No. 50) and Door−R (No. 51) on front panel A (No. 47), hook the long side of Door Spring (L) (No. 53) and Door Spring (R) (No. 54) onto the hooks on front panel A.


53, 54
58
50|51
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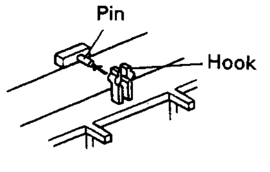
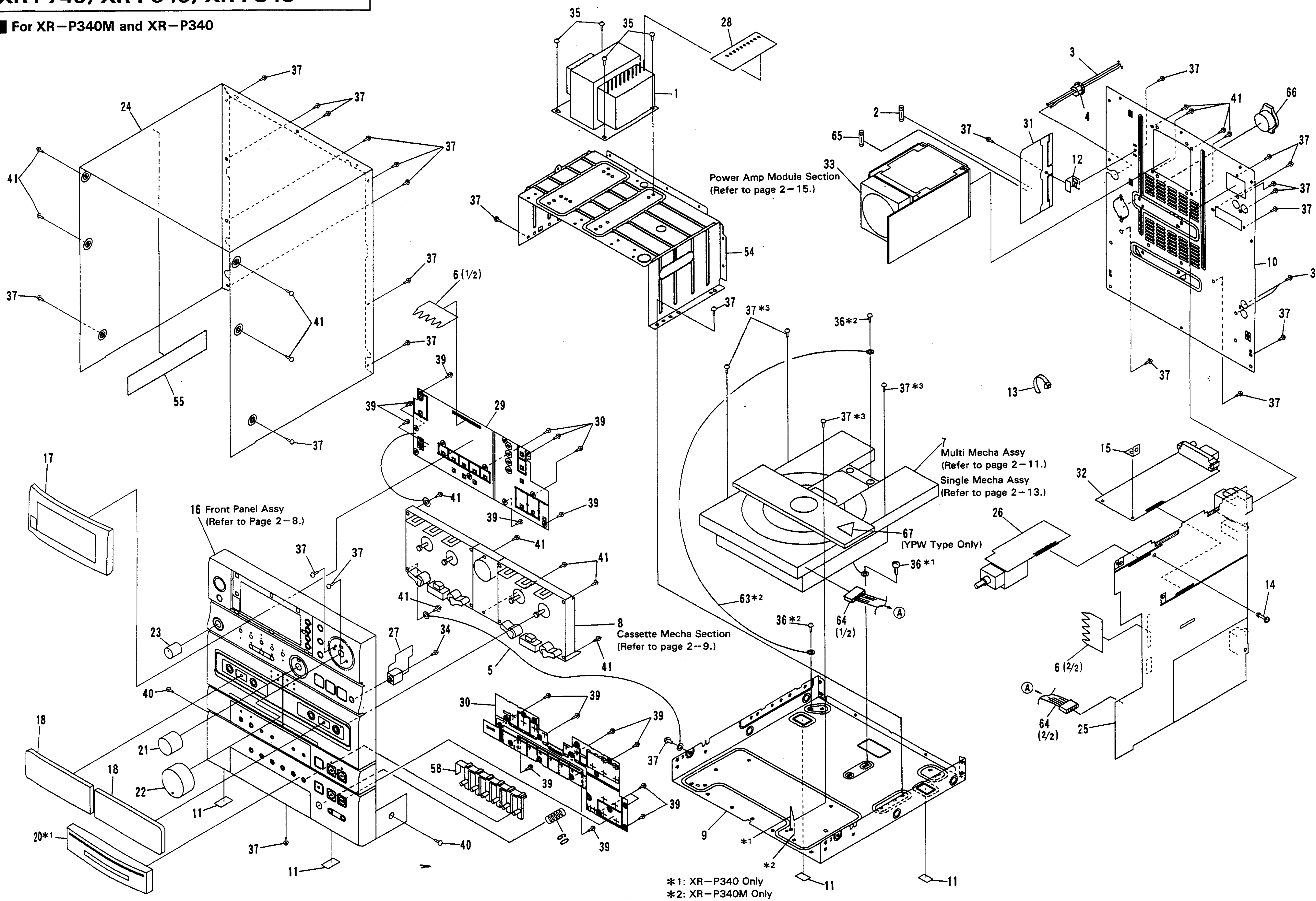
66

NOTE: When installing the AMP. TUNER button (No. 49), DECK. CD button (No. 55), DOLBY button (No. 60), and LEVEL button (No, 61), insert the hook on each button into the corresponding pin on the back of front panel A (No. 47) and front panel B (No. 59).



Section Ⓐ

■ For XR−P340M and XR−P340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17
16 Front Panel Assy
(Refer to Page 2−8.)
37
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8
Cassette Mecha Section
(Refer to page 2−9.)
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33
Power Amp Module Section
(Refer to page 2−15.)
37
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12
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37
41
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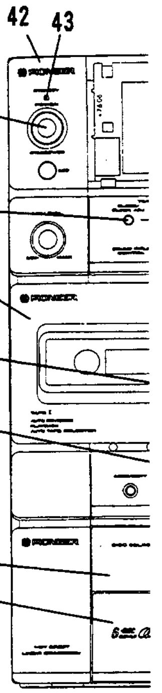
37
37
10
37
37
37
37
13
37*3
36*2
37*3
37*3
7
Multi Mecha Assy
(Refer to page 2−11.)
Single Mecha Assy
(Refer to page 2−13.)
67
(YPW Type Only)
36*1
63*2
36*2
64
(1/2)
Ⓐ
15
32
26
14
6 (2/2)
Ⓐ
64
(2/2)
25

∗1: XR−P340 Only
∗2: XR−P340M Only

Front Panel Assy


42
43
44 (1/4)
44 (3/4)
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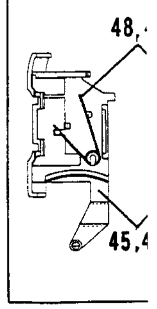
43
51(1/2)
59

● Prepara

After install
front panel
(No. 48) an
front panel



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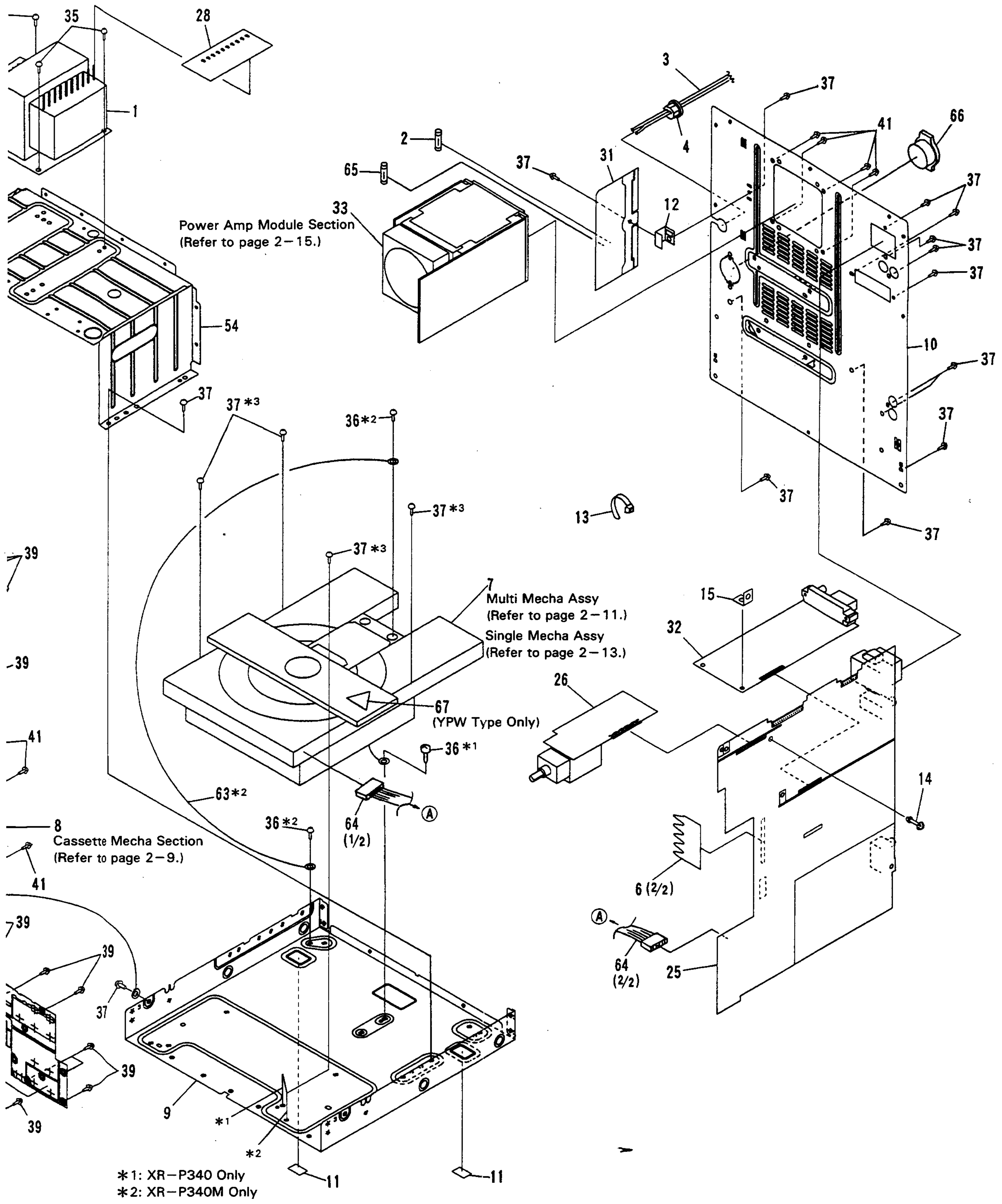
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33
Power Amp Module Section
(Refer to page 2−15.)
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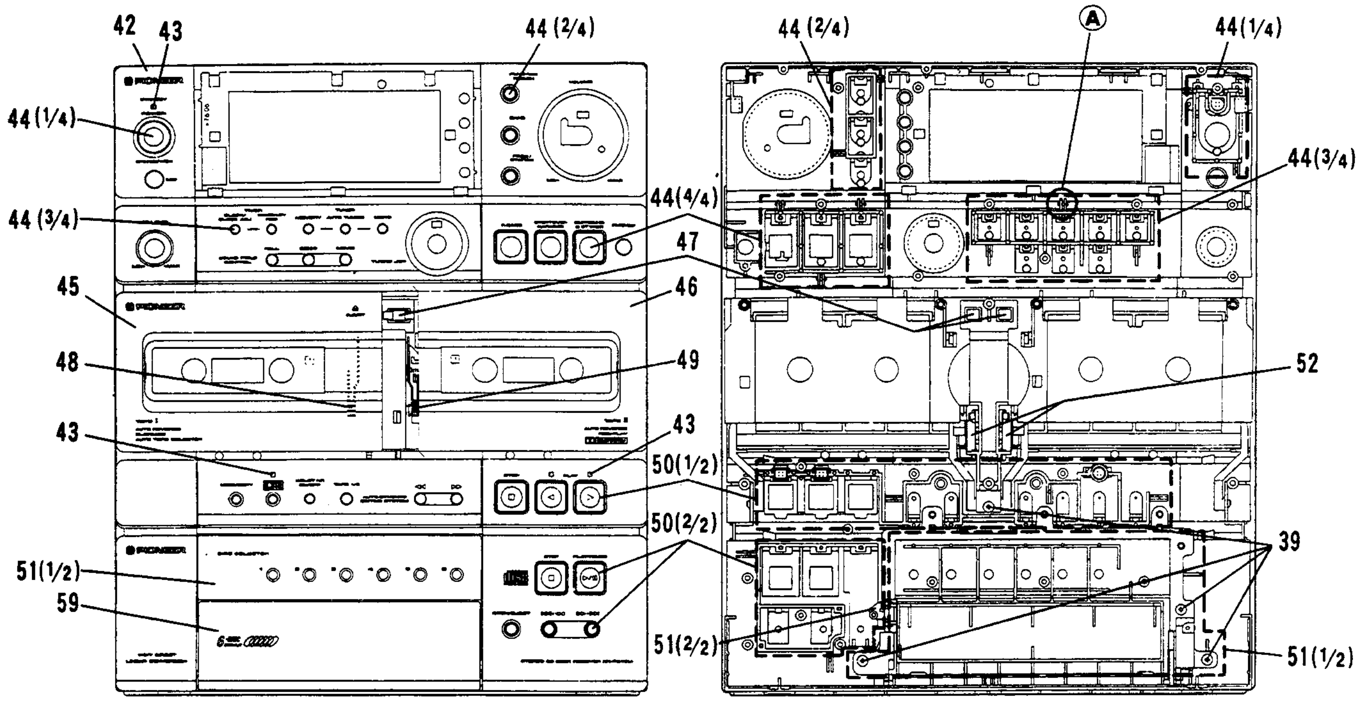
37
37 *3
36 *2
37
37
37 *3
13
37
39
37 *3
7
Multi Mecha Assy
(Refer to page 2−11.)
Single Mecha Assy
(Refer to page 2−13.)
15
32
39
26
67
(YPW Type Only)
41
36 *1
14
63 *2
8
Cassette Mecha Section
(Refer to page 2−9.)
36 *2
64
(1/2)
Ⓐ
41
6 (2/2)
39
39
Ⓐ
37
64
(2/2)
25
39
9
*1
39
*2
11
11

*1: XR−P340 Only
*2: XR−P340M Only

Front Panel Assy

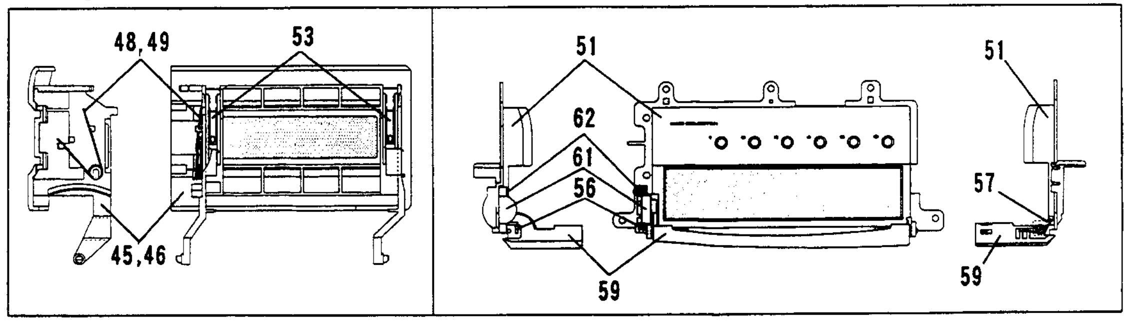

42
43
44 (2/4)
44 (1/4)
44 (3/4)
44 (4/4)
45
46
47
48
49
43
50 (1/2)
50 (2/2)
51 (1/2)
59
51 (2/2)
44 (2/4)
Ⓐ
44 (1/4)
44 (3/4)
52
39
51 (1/2)

Front View

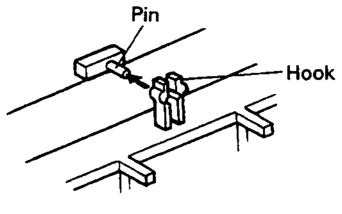
Rear View

● Preparation Prior to Assembling Door−LR Assy.

After installing Door−L (No. 45) and Door−R (No. 46) on front panel A (No. 42), hook the long side of Door Spring (L) (No. 48) and Door Spring (R) (No. 49) onto the hooks on front panel A.

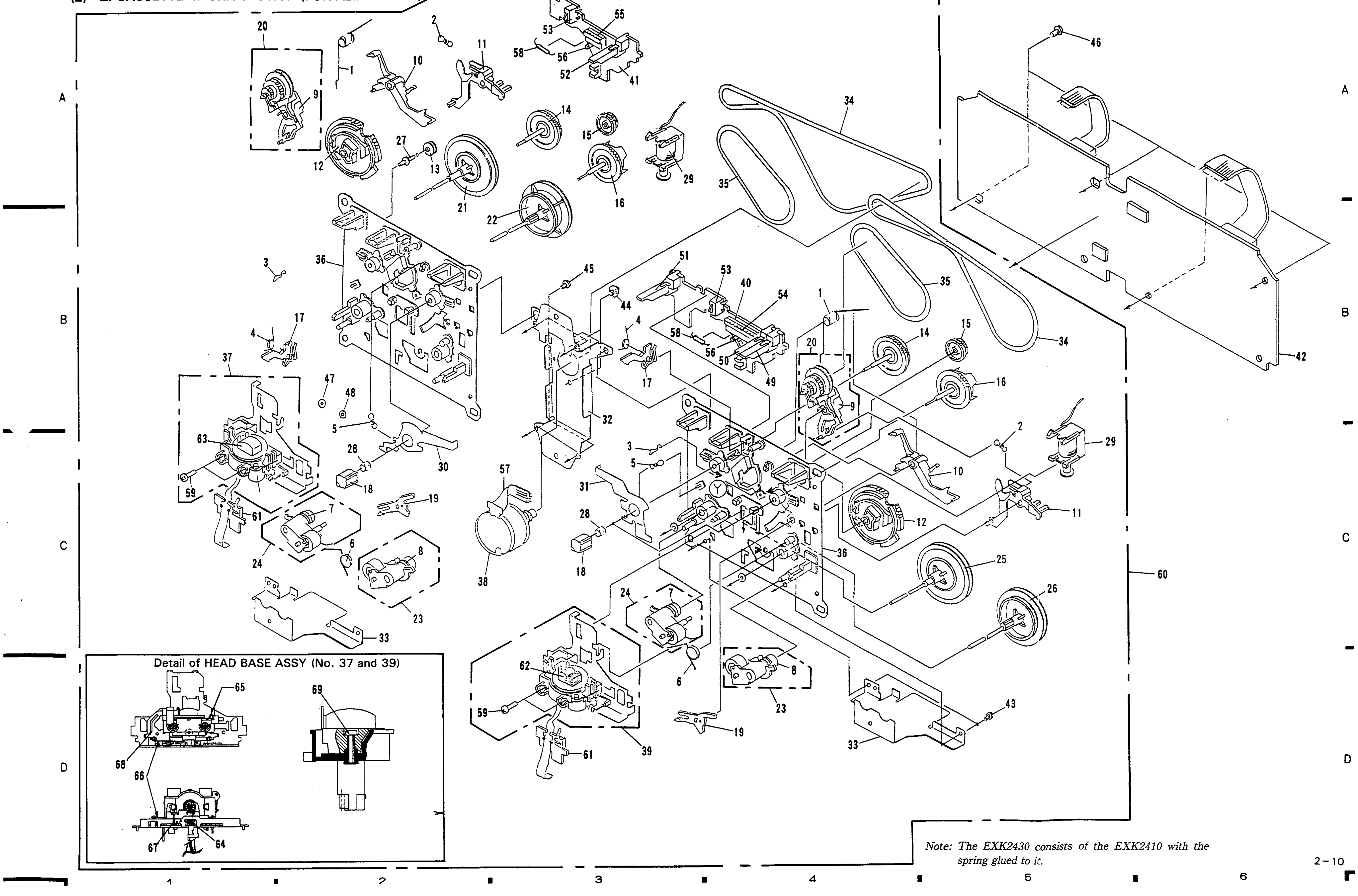

48,49
53
45,46
51
62
61
56
59
51
57
59

NOTE: When installing the AMP. TUNER button (No. 44) and DECK. CD button (No. 50), insert the hook on each button into the corresponding pin on the back of front panel A (No. 42). (Refer to the diagram below.)



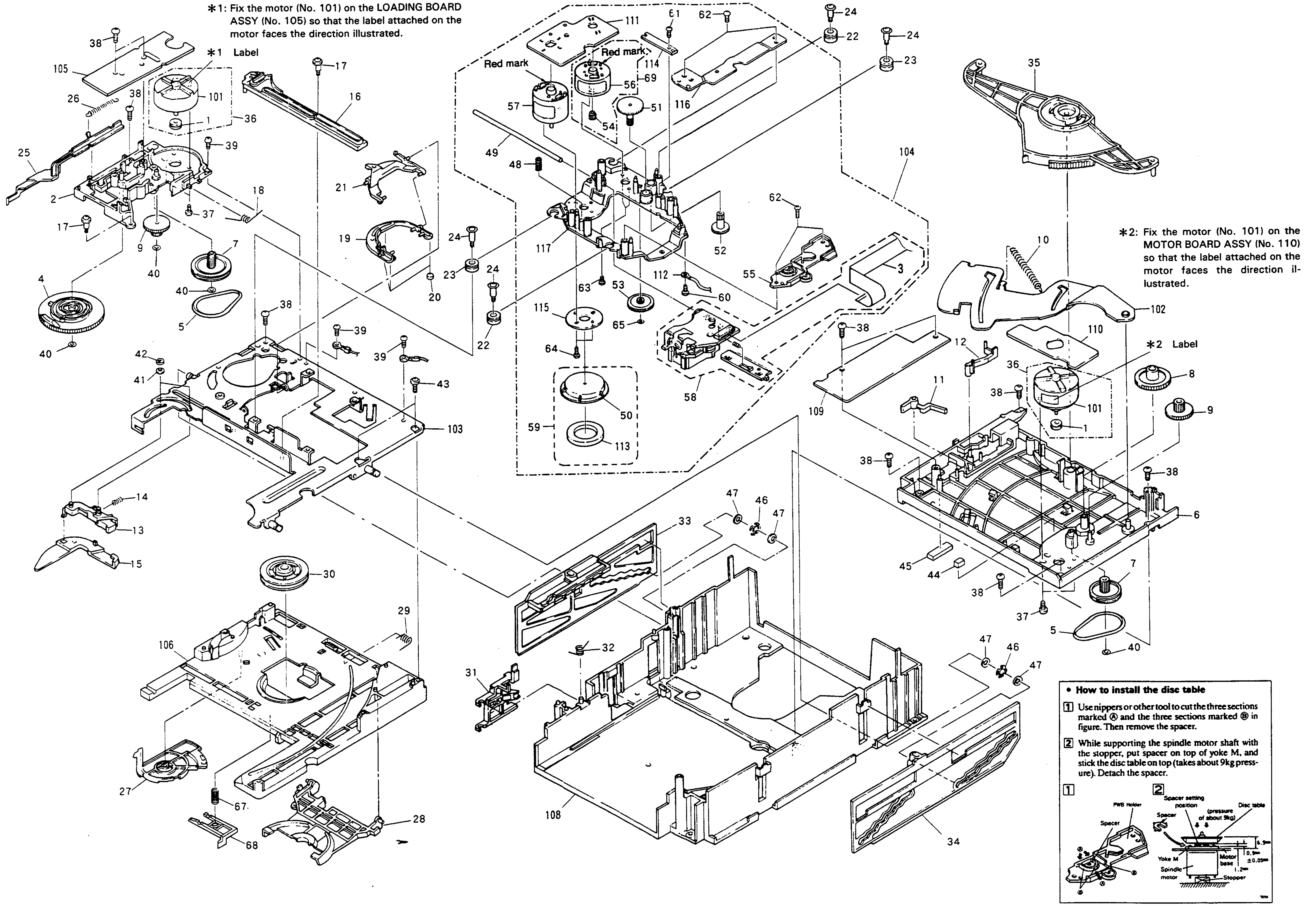
Section Ⓐ

(2)−2. CASSETTE MECHA SECTION (FOR ALL MODELS)


1
2
3
4
5
6
A
B
C
D
20
9
1
2
10
11
53
55
58
56
52
41
46
12
27
13
21
14
15
16
29
22
34
35
36
3
45
44
51
53
40
54
58
56
50
49
4
17
17
1
20
9
14
15
16
35
34
42
37
47
48
5
28
30
63
59
18
19
61
24
7
6
8
23
33
32
3
5
31
28
18
57
38
2
29
10
11
12
36
25
26
60
24
7
6
8
23
62
59
61
39
19
33
43
Detail of HEAD BASE ASSY (No. 37 and 39)
65
69
68
66
67
64

Note: The EXK2430 consists of the EXK2410 with the spring glued to it.

(2)−3. CD MULTI MECHA ASSY (FOR XR−P740M, XR−P640M AND XR−P340M)


3
4
5
6
A
B
C
D
1
2
3
4
5
6
38
105
26
38
*1 Label
101
1
36
39
25
2
17
37
18
9
7
40
4
40
5
40
17
16
21
19
20
23
24
22
24
38
39
39
43
42
41
103
14
13
15
30
29
106
27
67
68
28
31
32
33
47
46
47
108
34
47
46
47
111
61
62
Red mark
Red mark
114
69
57
56
51
54
49
48
117
52
62
55
3
112
60
63
53
65
115
64
58
50
59
113
116
24
22
24
23
104
35
10
102
110
*2 Label
12
11
36
38
101
1
8
9
109
38
38
38
6
45
44
7
38
37
5
40
PWB Holder
Spacer
Ⓐ
Ⓑ
Spacer setting position
Spacer
(pressure of about 9kg)
Disc table
Yoke M
Motor base
Spindle motor
Stopper
6.9mm
0.9mm ±0.05mm
1.2mm

*1: Fix the motor (No. 101) on the LOADING BOARD ASSY (No. 105) so that the label attached on the motor faces the direction illustrated.

*2: Fix the motor (No. 101) on the MOTOR BOARD ASSY (No. 110) so that the label attached on the motor faces the direction illustrated.

- **How to install the disc table**

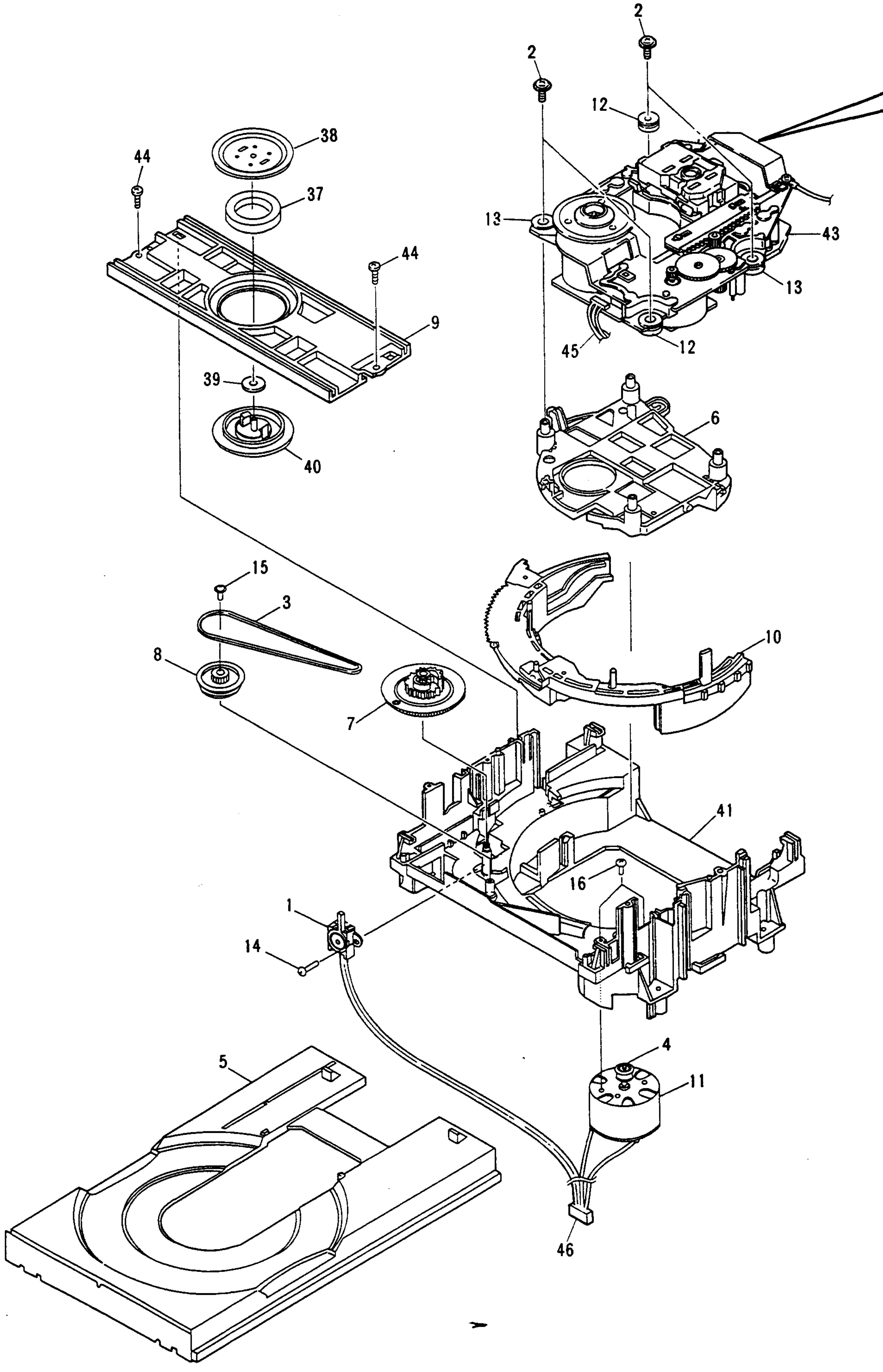
1 Use nippers or other tool to cut the three sections marked Ⓐ and the three sections marked Ⓑ in figure. Then remove the spacer.

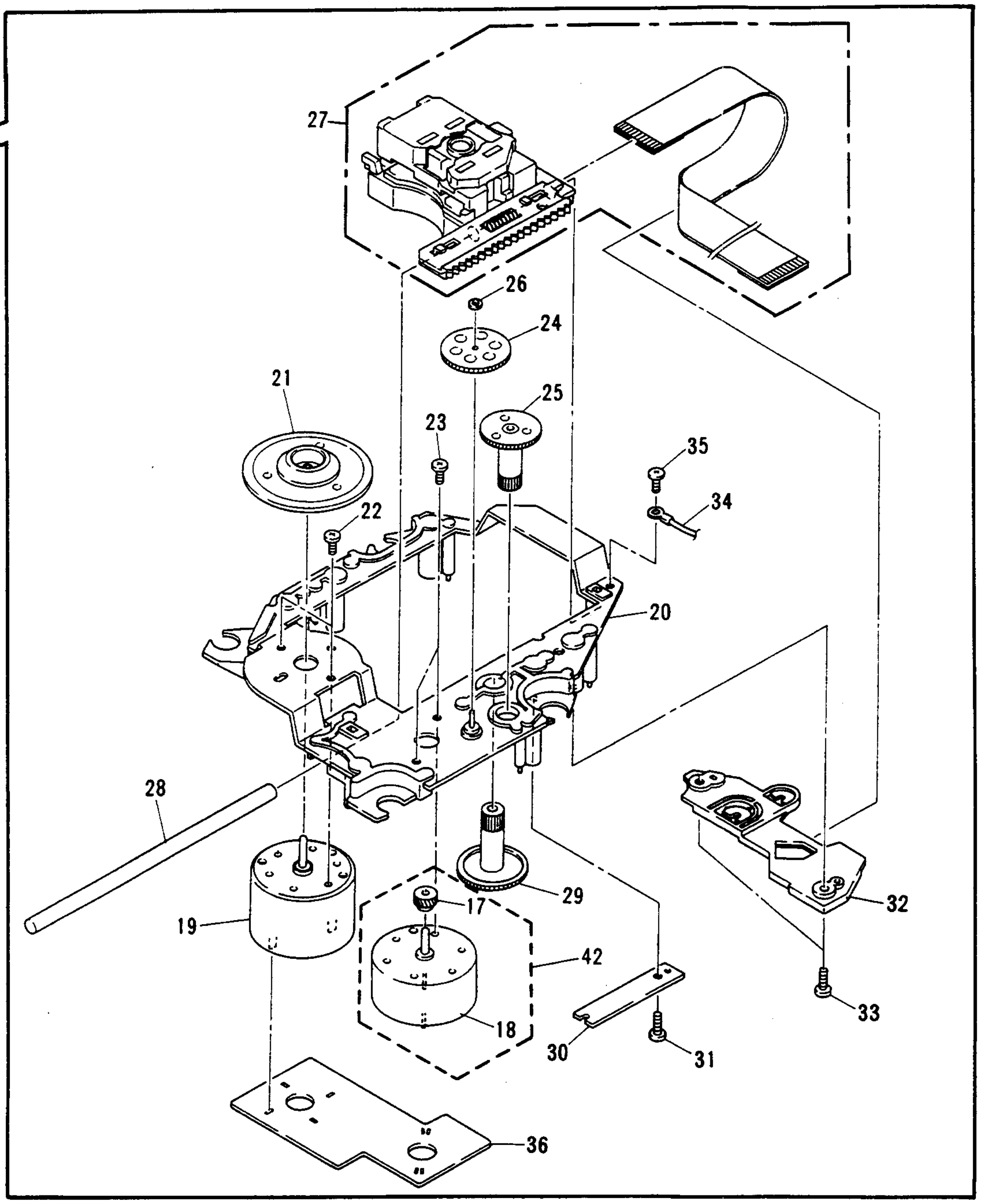
2 While supporting the spindle motor shaft with the stopper, put spacer on top of yoke M, and stick the disc table on top (takes about 9kg pressure). Detach the spacer.

1

2

(2)-4. CD SINGLE MECHA ASSY (FOR XR-P740, XR-P640 AND XR-P340)

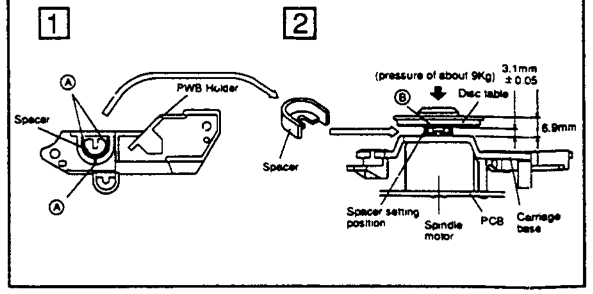

2
2
12
13
13
43
12
45
38
37
44
44
9
39
40
6
15
3
8
7
10
41
16
1
14
4
11
5
46


27
26
24
21
23
25
35
34
22
20
28
19
17
29
42
18
32
33
30
31
36

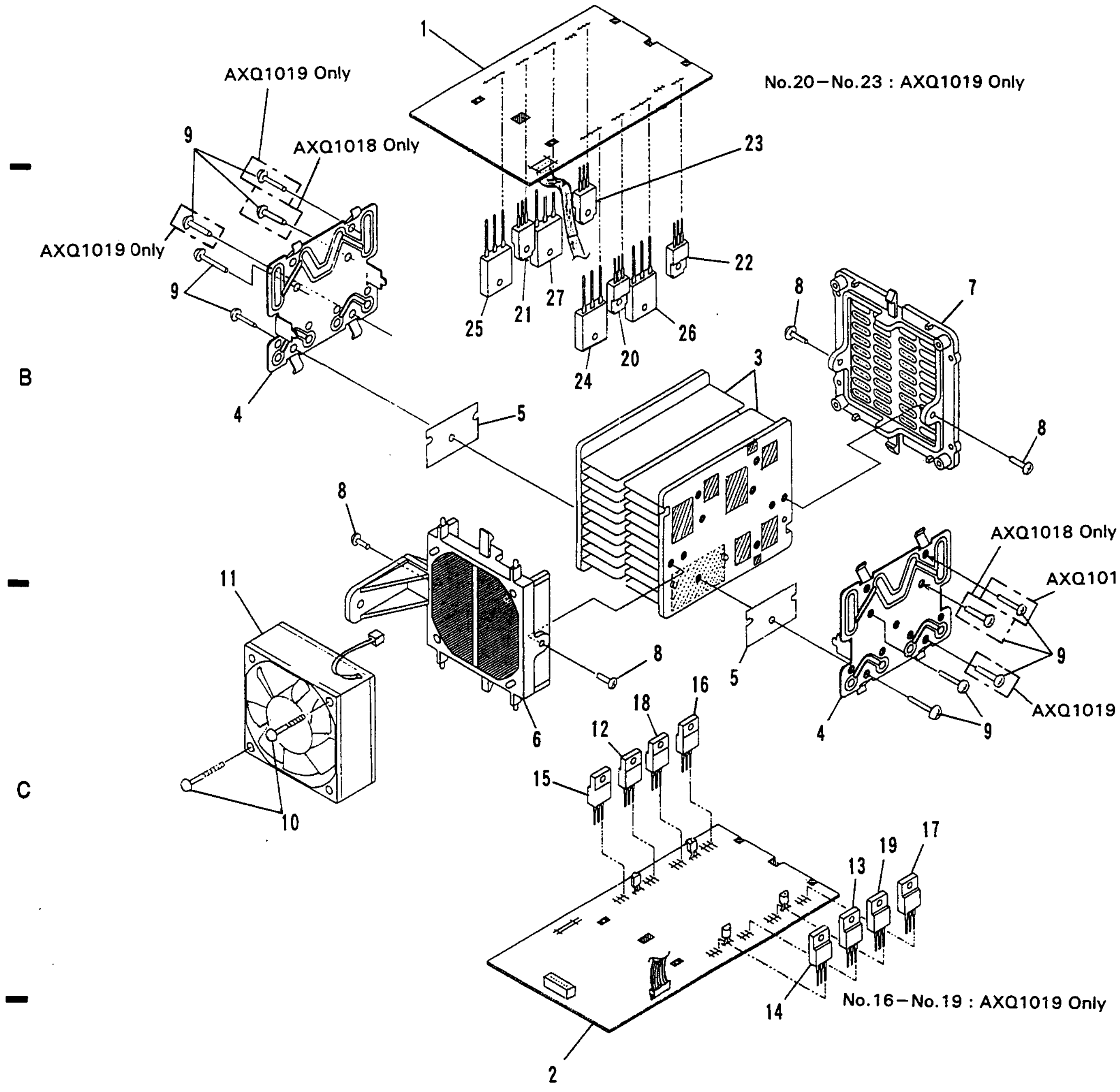
- How to install the disc table

1 Use nipper or other tool to cut the three sections marked Ⓐ figure 1. Then remove the spacer.

2 While supporting the spindle motor shaft with the stopper, put spacer on top of the motor base (angled so it doesn't touch section Ⓑ),and stick the disc table on top (takes about 9Kg pressure). Take off the spacer.


1
2
Ⓐ
Ⓐ
Ⓐ
Spacer
PWB Holder
Spacer
(pressure of about 9Kg)
3.1mm ± 0.05
Ⓑ
Disc table
6.9mm
Spacer setting position
Spindle motor
PCB
Carriage base

(2)−5. POWER AMP MODULE SECTION (FOR ALL MODELS)



Note: Ensure that silicon grease does not adhere to the MOLD A (No. 6) and MOLD B (No. 7).

2.2 SCHEMATIC AND PCB CONNECTION DIAGRAM

NOTE FOR SCHEMATIC DIAGRAMS (Type 1A)

1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**
2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.**
3. **RESISTORS:**
   Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
   Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
   Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
4. **CAPACITORS:**
   Unit: p:pF or µF unless otherwise noted.
   Ratings: capacitor (µF)/ voltage (V) unless otherwise noted.
   Rated voltage: 50V except for electrolytic capacitors.
5. **COILS:**
   Unit: m:mH or µH unless otherwise noted.
6. **VOLTAGE AND CURRENT:**
   V : Signal voltage at rated output.
   or ← V :
   DC voltage (V) at no input signal unless otherwise noted.
   Value in ( ) is DC voltage at rated power.
   ⇦ mA or ← mA :
   DC current at no input signal unless otherwise noted.
7. **OTHERS:**
   - ⊘ or ⊘ : Adjusting point.
   - : Measurement point.
   - The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
8. **SCH−☐ ON THE SCHEMATIC DIAGRAM:**
   - SCH−☐ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)
9. **SWITCHES** (Underline indicates switch position):

DISPLAY assy

S1801	FREQ/STATION
S1802	BAND
S1803	FUNCTION
S1804	POWER STANDBY
S1805	MONO
S1806	P. BASS
S1807	ONE-TOUCH KARAOKE
S1808	ST WIDE(XR-P740M SERIES) SURROUND & ST WIDE (XR-P340M SERIES)
S1809	AUTO TUNING
S1810	HALL
S1811	DISCO
S1812	MOVIE
S1813	MEMORY
S1814	WAKE-UP/REC
S1815	CLOCK/CLOCK ADJ
S1901	TUNING JOG

ADDON DISPALY assy
(XR-P740M SERIES ONLY)

S3951	CENTER/REAR LEVEL −
S3952	CENTER/REAR LEVEL +
S3953	CENTER MODE
S3954	CENTER/REAR
S3955	DOLBY MODE

CD DECK SW assy
(XR-P740M, XR-640M, XR-P340M)

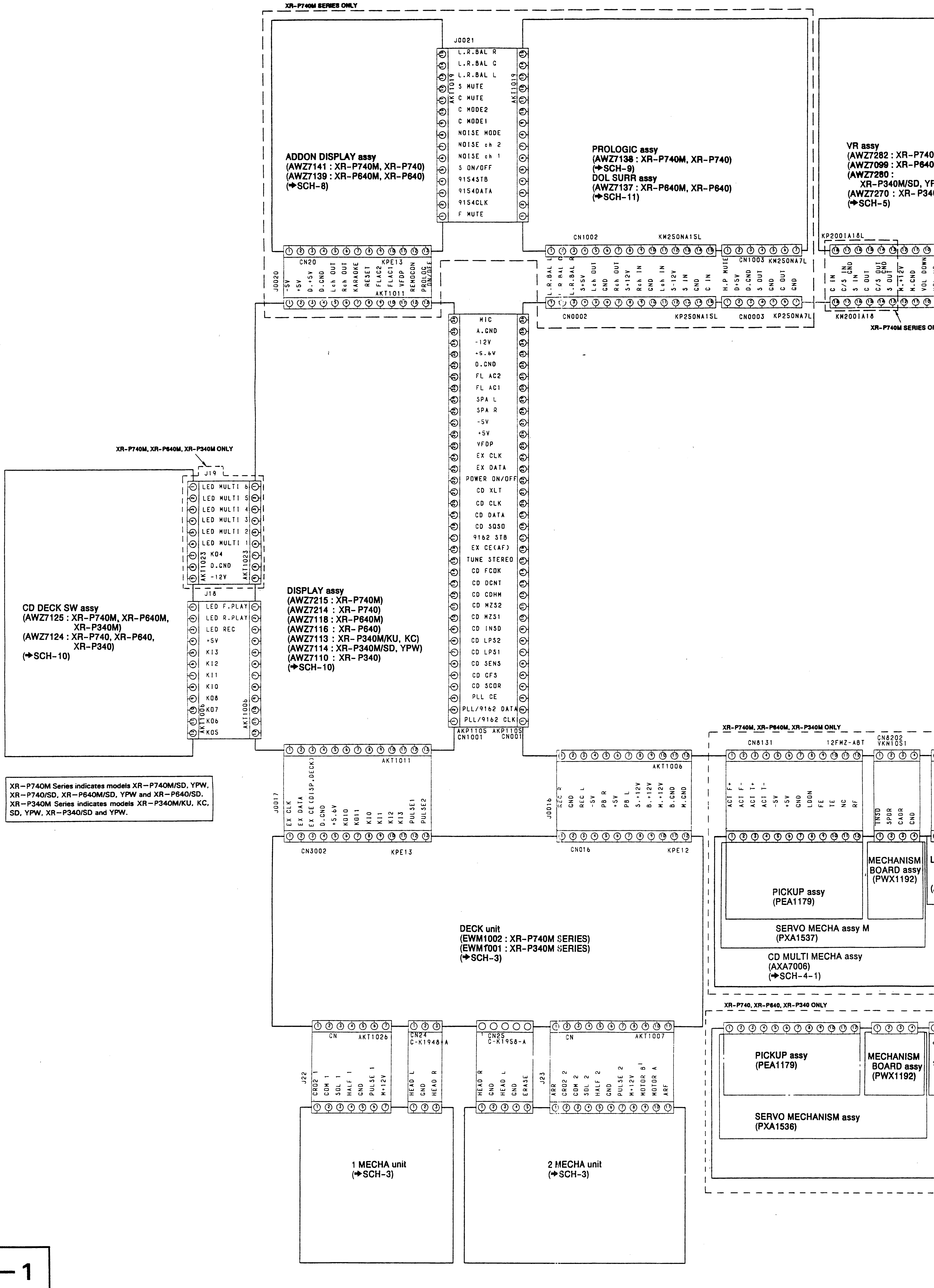
S1816	◀◀
S1817	▶▶
S1818	STOP(TAPE)
S1819	◀
S1820	ASES/COPY
S1821	●❚❚
S1822	DOLBY NR
S1823	TAPE 1/2
S1824	▶▶ · ▶▶❙
S1825	STOP(CD)
S1826	PLAY/PAUSE
S1827	▶
S1828	OPEN/EJECT
S1829	❙◀◀ · ◀◀
S1830	MULTI 6
S1831	MULTI 5
S1832	MULTI 1
S1833	MULTI 2
S1834	MULTI 3
S1835	MULTI 4

CD DECK SW assy
(XR-P740, XR-640, XR-P340)

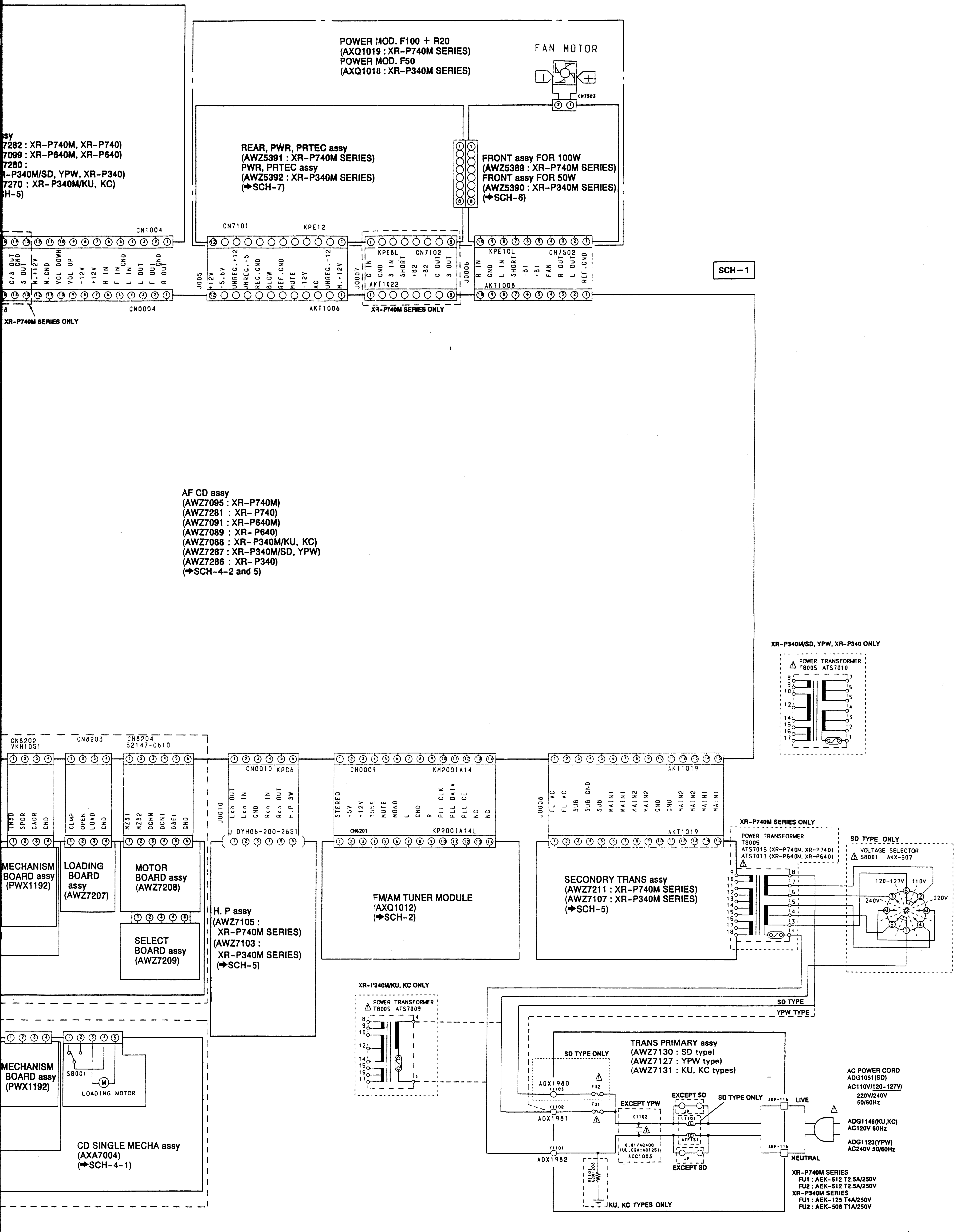
S1816	◀◀
S1817	▶▶
S1818	STOP(TAPE)
S1819	◀
S1820	ASES/COPY
S1821	●❚❚
S1822	DOLBY NR
S1823	TAPE 1/2
S1824	▶▶ · ▶▶❙
S1825	STOP(CD)
S1826	PLAY/PAUSE
S1827	▶
S1829	❙◀◀ · ◀◀
S1836	OPEN/CLOSE

XR−P740M Series indicates models XR−P740M/SD, YPW, XR−P740/SD, XR−P640M/SD, YPW and XR−P640/SD.
XR−P340M Series indicates models XR−P340M/KU, KC, SD, YPW, XR−P340/SD and YPW.

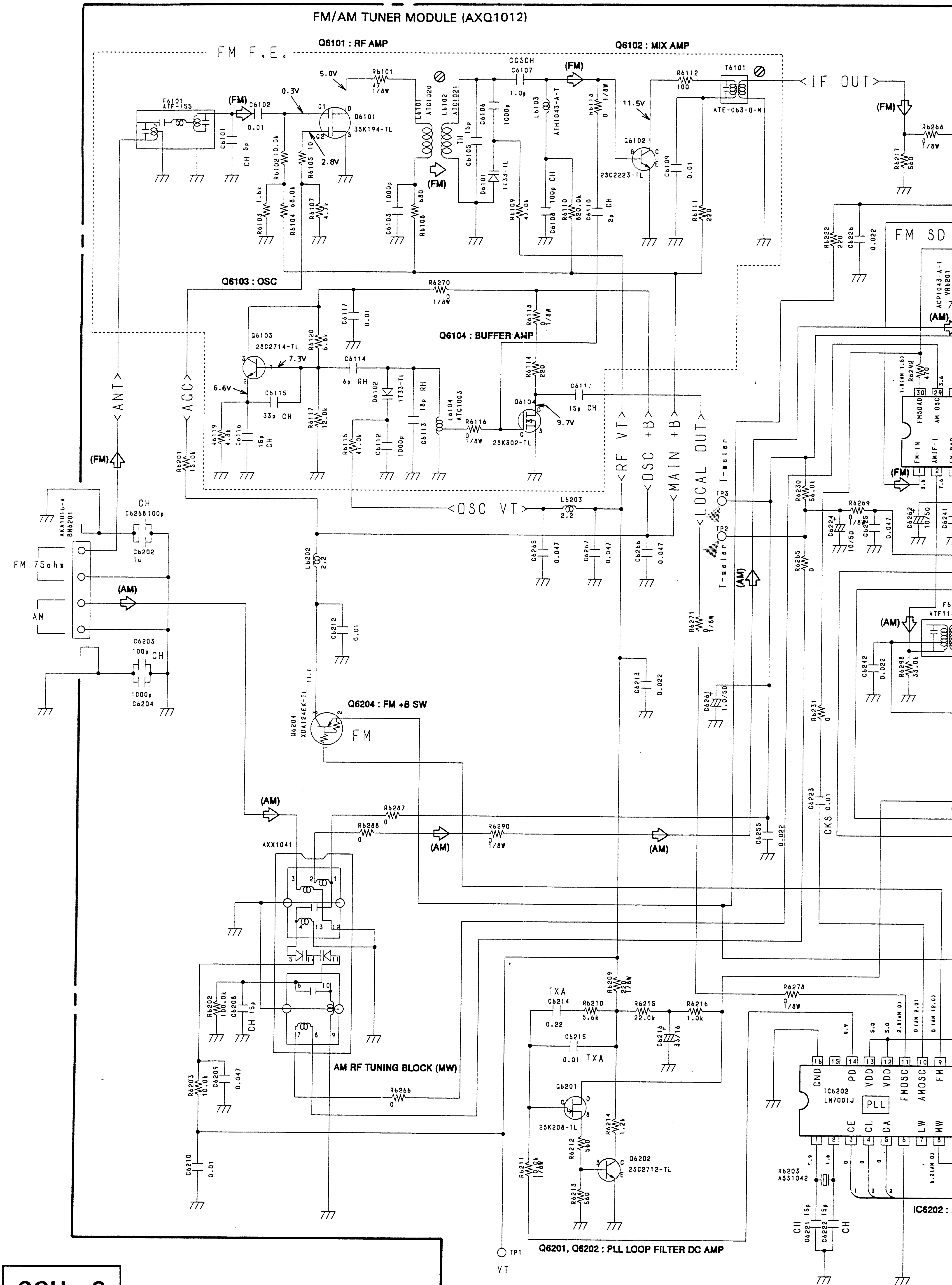
1. OVERALL SCHEMATIC DIAGRAM, TRANS PRIMARY ASSY


XR-P740M SERIES ONLY
ADDON DISPLAY assy
(AWZ7141 : XR-P740M, XR-P740)
(AWZ7139 : XR-P640M, XR-P640)
(➔SCH-8)
J0021
AKT1019
L.R.BAL R
L.R.BAL C
L.R.BAL L
S MUTE
C MUTE
C MODE2
C MODE1
NOISE MODE
NOISE ch 2
NOISE ch 1
S ON/OFF
9154STB
9154DATA
9154CLK
F MUTE
PROLOGIC assy
(AWZ7138 : XR-P740M, XR-P740)
(➔SCH-9)
DOL SURR assy
(AWZ7137 : XR-P640M, XR-P640)
(➔SCH-11)
VR assy
(AWZ7282 : XR-P740
(AWZ7099 : XR-P640
(AWZ7280 :
XR-P340M/SD, YF
(AWZ7270 : XR-P34
(➔SCH-5)
CN20
KPE13
J0020
-5V
+5V
D.+5V
D.GND
Lch OUT
Rch OUT
KARAOKE
RESET
FLAC2
FLAC1
VFDP
REMOCON
PROLOG ON/OFF
AKT1011
CN1002
KM250NA15L
CN1003 KM250NA7L
L.R.BAL L
L.R.BAL C
L.R.BAL R
S+5V
Lch OUT
GND
Rch OUT
S+12V
Rch IN
GND
Lch IN
S-12V
S IN
GND
C IN
H.P MUTE
D+5V
D.GND
S OUT
GND
C OUT
GND
CN0002
KP250NA15L
CN0003 KP250NA7L
KP2001A18L
C IN
C/S IN GND
S IN
C OUT
C/S OUT GND
S OUT
M.+12V
VOL DOWN
KM2001A18
XR-P740M SERIES ON
MIC
A.GND
-12V
+5.6V
D.GND
FL AC2
FL AC1
SPA L
SPA R
-5V
+5V
VFDP
EX CLK
EX DATA
POWER ON/OFF
CD XLT
CD CLK
CD DATA
CD SQSO
9162 STB
EX CE(AF)
TUNE STEREO
CD FCOK
CD DCNT
CD CDHM
CD MZS2
CD MZS1
CD INSD
CD LPS2
CD LPS1
CD SENS
CD GFS
CD SCOR
PLL CE
PLL/9162 DATA
PLL/9162 CLK
AKP1105 AKP1105
CN1001 CN001
XR-P740M, XR-P640M, XR-P340M ONLY
J19
LED MULTI 6
LED MULTI 5
LED MULTI 4
LED MULTI 3
LED MULTI 2
LED MULTI 1
K04
D.GND
-12V
AKT1023
J18
LED F.PLAY
LED R.PLAY
LED REC
+5V
K13
K12
K11
K10
K08
K07
K06
K05
AKT1006
CD DECK SW assy
(AWZ7125 : XR-P740M, XR-P640M,
XR-P340M)
(AWZ7124 : XR-P740, XR-P640,
XR-P340)
(➔SCH-10)
DISPLAY assy
(AWZ7215 : XR-P740M)
(AWZ7214 : XR-P740)
(AWZ7118 : XR-P640M)
(AWZ7116 : XR-P640)
(AWZ7113 : XR-P340M/KU, KC)
(AWZ7114 : XR-P340M/SD, YPW)
(AWZ7110 : XR-P340)
(➔SCH-10)
AKT1011
J0017
EX CLK
EX DATA
EX CE(DISP,DECK)
D.GND
+5.6V
KO10
KO11
KI0
KI1
KI2
KI3
PULSE1
PULSE2
CN3002
KPE13
AKT1006
J0016
REC 2
GND
REC L
-5V
PB R
+5V
PB L
S.+12V
B.+12V
M.+12V
B.GND
M.GND
CN016
KPE12
XR-P740M, XR-P640M, XR-P340M ONLY
CN8131
12FMZ-A8T
CN8202
VKN1051
ACT F+
ACT F-
ACT T+
ACT T-
-5V
+5V
GND
LDON
FE
TE
NC
RF
INSD
SPDR
CADR
GND
PICKUP assy
(PEA1179)
MECHANISM
BOARD assy
(PWX1192)
SERVO MECHA assy M
(PXA1537)
CD MULTI MECHA assy
(AXA7006)
(➔SCH-4-1)
DECK unit
(EWM1002 : XR-P740M SERIES)
(EWM1001 : XR-P340M SERIES)
(➔SCH-3)
XR-P740, XR-P640, XR-P340 ONLY
CN
AKT1026
CN24
C-K1948-A
CN25
C-K1958-A
CN
AKT1007
J22
CRO2 1
COM 1
SOL 1
HALF 1
GND
PULSE 1
M+12V
HEAD L
GND
HEAD R
HEAD R
GND
HEAD L
GND
ERASE
J23
ARR
CRO2 2
COM 2
SOL 2
HALF 2
GND
PULSE 2
M+12V
MOTOR B
MOTOR A
ARF
PICKUP assy
(PEA1179)
MECHANISM
BOARD assy
(PWX1192)
SERVO MECHANISM assy
(PXA1536)
1 MECHA unit
(➔SCH-3)
2 MECHA unit
(➔SCH-3)

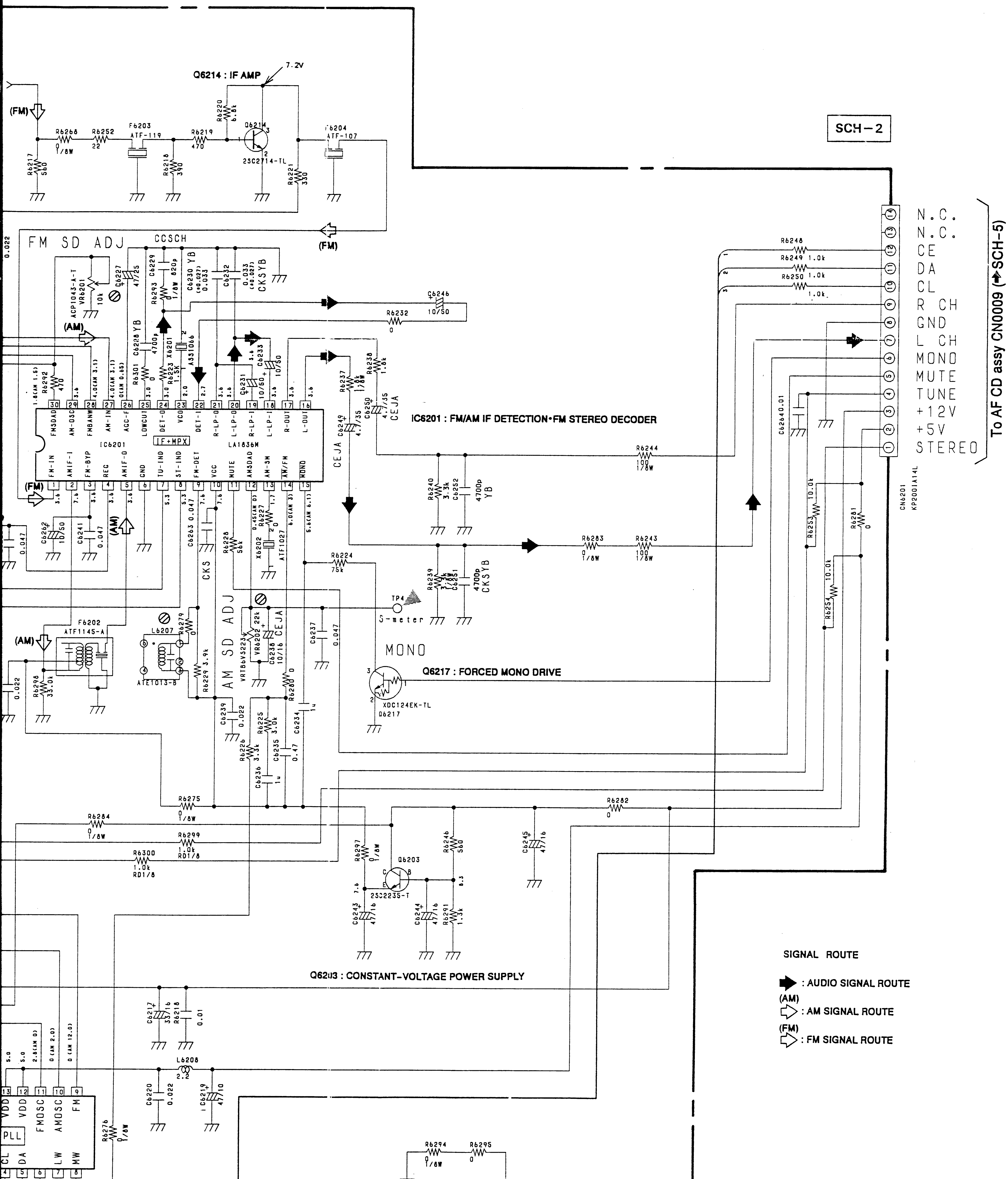
XR-P740M Series indicates models XR-P740M/SD, YPW, XR-P740/SD, XR-P640M/SD, YPW and XR-P640/SD.
XR-P340M Series indicates models XR-P340M/KU, KC, SD, YPW, XR-P340/SD and YPW.


POWER MOD. F100 + R20
(AXQ1019 : XR-P740M SERIES)
POWER MOD. F50
(AXQ1018 : XR-P340M SERIES)
FAN MOTOR
CN7503
REAR, PWR, PRTEC assy
(AWZ5391 : XR-P740M SERIES)
PWR, PRTEC assy
(AWZ5392 : XR-P340M SERIES)
(➔SCH-7)
FRONT assy FOR 100W
(AWZ5389 : XR-P740M SERIES)
FRONT assy FOR 50W
(AWZ5390 : XR-P340M SERIES)
(➔SCH-6)
7282 : XR-P740M, XR-P740)
7099 : XR-P640M, XR-P640)
7280 :
-P340M/SD, YPW, XR-P340)
7270 : XR-P340M/KU, KC)
H-5)
CN1004
C/S OUT
S GND
S OUT
M.+12V
M.GND
VOL DOWN
VOL UP
-12V
+12V
R IN
F IN
GND
L IN
L OUT
F OUT
GND
R OUT
CN0004
XR-P740M SERIES ONLY
CN7101
KPE12
J005
+12V
+5.6V
UNREG.+12
UNREG.+5
REG.GND
BLOW
REF.GND
MUTE
-12V
AC
UNREG.-12
M.+12V
AKT1006
KPE8L
CN7102
J0007
C IN
GND
S IN
SHORT
+B2
-B2
C OUT
S OUT
AKT1022
XR-P740M SERIES ONLY
KPE10L
CN7502
J0006
R IN
GND
L IN
SHORT
-B1
+B1
FAN
R OUT
L OUT
REF.GND
AKT1008
SCH-1
AF CD assy
(AWZ7095 : XR-P740M)
(AWZ7281 : XR-P740)
(AWZ7091 : XR-P640M)
(AWZ7089 : XR-P640)
(AWZ7088 : XR-P340M/KU, KC)
(AWZ7287 : XR-P340M/SD, YPW)
(AWZ7286 : XR-P340)
(➔SCH-4-2 and 5)
XR-P340M/SD, YPW, XR-P340 ONLY
POWER TRANSFORMER
T8005 ATS7010
CN8202
VKN1051
CN8203
CN8204
52147-0610
TRSD
SPDR
CADR
GND
CLMP
OPEN
LOAD
GND
MZS1
MZS2
DCHN
DCNT
DSEL
GND
MECHANISM BOARD assy (PWX1192)
LOADING BOARD assy (AWZ7207)
MOTOR BOARD assy (AWZ7208)
SELECT BOARD assy (AWZ7209)
CN0010 KPC6
J0010
Lch OUT
Lch IN
GND
Rch IN
Rch OUT
H.P SW
DYH06-200-2651
H. P assy
(AWZ7105 :
XR-P740M SERIES)
(AWZ7103 :
XR-P340M SERIES)
(➔SCH-5)
CN0009
KM200IA14
STEREO
+5V
+12V
TUNE
MUTE
MONO
L
GND
R
PLL CLK
PLL DATA
PLL CE
NC
NC
CN6201
KP200IA14L
FM/AM TUNER MODULE
(AXQ1012)
(➔SCH-2)
AKT1019
J0008
FL AC
FL AC
SUB
SUB GND
SUB
MAIN1
MAIN1
MAIN2
GND
GND
MAIN2
MAIN2
MAIN1
SECONDRY TRANS assy
(AWZ7211 : XR-P740M SERIES)
(AWZ7107 : XR-P340M SERIES)
(➔SCH-5)
XR-P740M SERIES ONLY
POWER TRANSFORMER
T8005
ATS7015 (XR-P740M, XR-P740)
ATS7013 (XR-P640M, XR-P640)
SD TYPE ONLY
VOLTAGE SELECTOR
S8001 AKX-507
120-127V
110V
240V
220V
MECHANISM BOARD assy (PWX1192)
S8001
LOADING MOTOR
CD SINGLE MECHA assy
(AXA7004)
(➔SCH-4-1)
XR-P340M/KU, KC ONLY
POWER TRANSFORMER
T8005 ATS7009
SD TYPE
YPW TYPE
TRANS PRIMARY assy
(AWZ7130 : SD type)
(AWZ7127 : YPW type)
(AWZ7131 : KU, KC types)
SD TYPE ONLY
ADX1980
Y1103
FU2
Y1102
FU1
ADX1981
EXCEPT YPW
C1102
0.01/AC400
(UL,CSA:AC125)
ACG1003
EXCEPT SD
JP
L1101
ATF151
JP
EXCEPT SD
SD TYPE ONLY
AKF-11A
LIVE
AKF-11A
NEUTRAL
Y1101
ADX1982
R1101
KU, KC TYPES ONLY
AC POWER CORD
ADG1051(SD)
AC110V/120-127V/
220V/240V
50/60Hz
ADG1146(KU,KC)
AC120V 60Hz
ADG1123(YPW)
AC240V 50/60Hz
XR-P740M SERIES
FU1 : AEK-512 T2.5A/250V
FU2 : AEK-512 T2.5A/250V
XR-P340M SERIES
FU1 : AEK-125 T4A/250V
FU2 : AEK-508 T1A/250V

2. FM/AM TUNER MODULE


FM/AM TUNER MODULE (AXQ1012)
FM F.E.
Q6101 : RF AMP
Q6102 : MIX AMP
Q6103 : OSC
Q6104 : BUFFER AMP
Q6204 : FM +B SW
Q6201, Q6202 : PLL LOOP FILTER DC AMP
AM RF TUNING BLOCK (MW)
AXX1041
IC6202
LM7001J
PLL
<IF OUT>
<ANT>
<AGC>
<RF VT>
<OSC +B>
<MAIN +B>
<LOCAL OUT>
<OSC VT>
FM 75ohm
AM
FM SD
T-meter
TP1
TP2
TP3
VT
(FM)
(AM)
3SK194-TL
2SC2223-TL
2SC2714-TL
2SK302-TL
2SK208-TL
2SC2712-TL
XDA124EK-TL
ATE-063-0-M
ATF-155
AKA1016-A
X6203
A551042
5.0V
0.3V
2.8V
11.5V
7.3V
6.6V
9.7V
TXA
GND
PD
VDD
FMOSC
AMOSC
CE
CL
DA
LW
MW
CKS

SCH-2


Q6214 : IF AMP
7.2V
(FM)
R6268 0 1/8W
R6252 22
F6203 ATF-119
R6219 470
Q6214
2SC2714-TL
F6204 ATF-107
R6217 560
R6218 390
R6220 6.8k
R6221 330
(FM)
FM SD ADJ
CCSCH
ACP1043-A-T VR6201 10k
C6227 47/25
C6229
R6293 0 1/8W 820p
C6230 YB (0.027) 0.033
C6232
0.033 (0.027) CKSYB
C6246 10/50
R6232 0
(AM)
R6301 0
C6228 YB 4700p
R6223 1.5K
X6201 A551066
C6231 10/50
C6233 10/50
R6237 1/8W 1.0k
R6238 1.0k
C6249 4.7/35
C6250 4.7/35
CEJA
R6292 470
IC6201 : FM/AM IF DETECTION•FM STEREO DECODER
FMSDAD AM-OSC FMBANW AM-IN AGC-F LOWCUT DET-O VCO DET-I R-LP-O L-LP-O R-LP-I L-LP-I R-OUT L-OUT
IC6201
IF+MPX
LA1836M
FM-IN AMIF-I FM-BYP REG AMIF-O GND TU-IND ST-IND FM-DET VCC MUTE AMSDAD AM-SM AM/FM MONO
(FM)
(AM)
C6262 10/50
C6241 0.047
C6263 0.047
CKS
R6228 56k
X6202
R6227 0
ATF1027
R6224 75k
R6240 3.3k
C6252 4700p YB
R6239 3.3k
C6251 4700p CKSYB
R6244 100 1/8W
R6283 0 1/8W
R6243 100 1/8W
TP4
S-meter
F6202 ATF1145-A
(AM)
L6207
ATET013-B
R6279 0
R6229 3.9k
AM SD ADJ
VRTB6VS223 VR6202 22k
C6238 10/16
CEJA
C6237 0.047
R6280 0
MONO
Q6217 : FORCED MONO DRIVE
XDC124EK-TL Q6217
R6298 33.0k
C6239 0.022
R6226 3.3k
R6225 3.0k
C6235 0.47
C6236 1u
C6234 1u
R6275 0 1/8W
R6284 0 1/8W
R6299 1.0k RD1/8
R6300 1.0k RD1/8
R6297 0 1/8W
Q6203
2SC2235-T
R6246 560
C6245 47/16
R6282 0
C6243 47/16
C6244 47/16
R6291 1.3k
Q6203 : CONSTANT-VOLTAGE POWER SUPPLY
C6217 33/16
R6216 0.01
L6208 2.2
C6220 0.022
C6219 47/10
VDD VDD FMOSC AMOSC FM
PLL
CL DA LW MW
R6276 0 1/8W
IC6202 : PLL IC
R6294 0 1/8W
R6295 0
R6248
R6249 1.0k
R6250 1.0k
1.0k
C6264 0.01
R6253 10.0k
R6254 10.0k
R6281 0
CN6201 KP2001A14L
N.C.
N.C.
CE
DA
CL
R CH
GND
L CH
MONO
MUTE
TUNE
+12V
+5V
STEREO
To AF CD assy CN0009 (→SCH-5)

SIGNAL ROUTE

➡ : AUDIO SIGNAL ROUTE

(AM) ⇨ : AM SIGNAL ROUTE

(FM) ⇨ : FM SIGNAL ROUTE

NOTE : VOLTAGE AND CURRENT

mV : Signal voltage at FM 1kHz, 100% MOD.

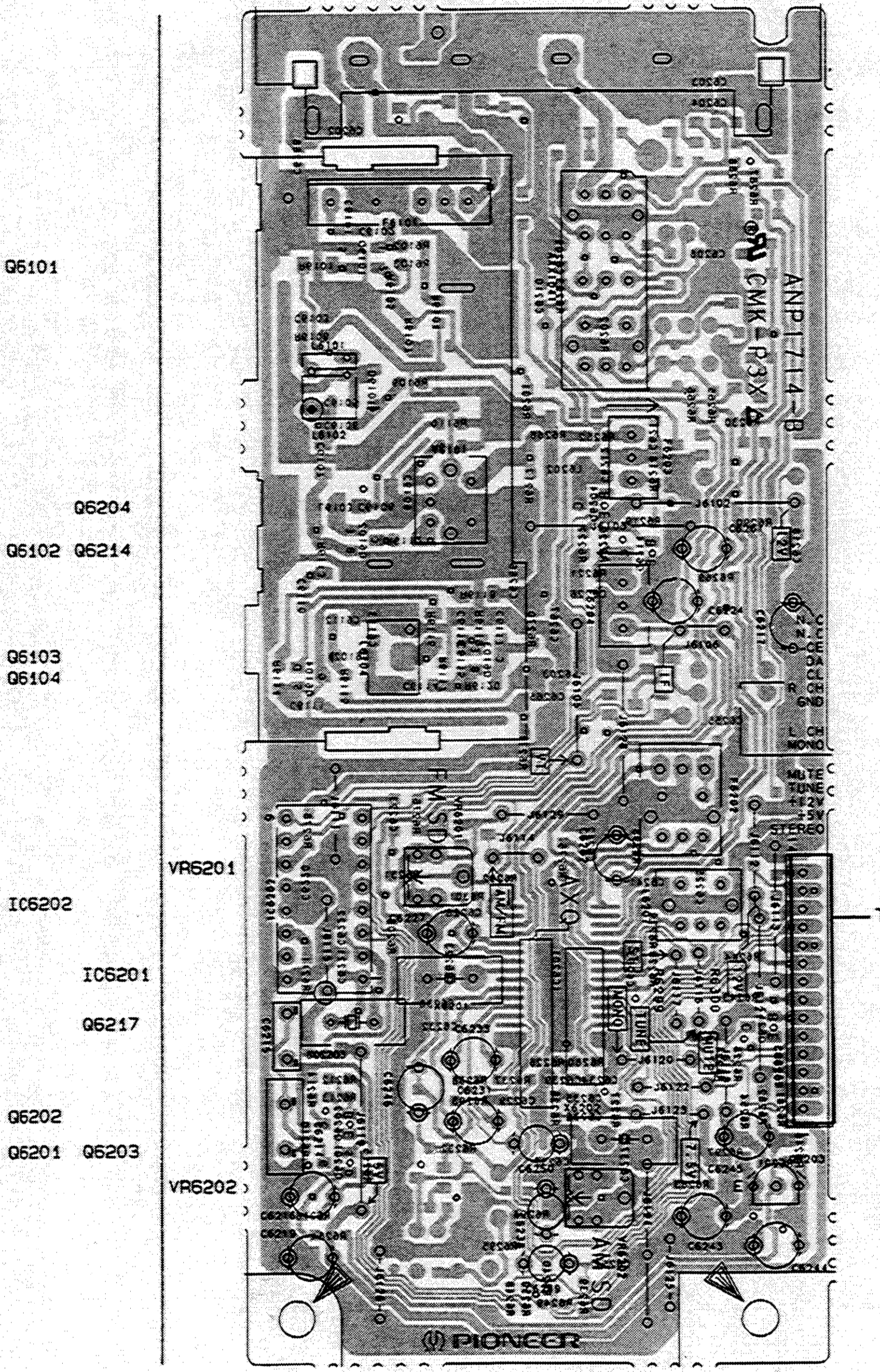
or ← V :
DC voltage (V) at no input signal unless otherwise noted.
Value in ( ) is DC voltage at rated power.

⇦ mA or ← mA :
DC current at no input signal unless otherwise noted.

SCH-2

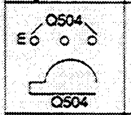
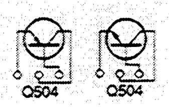
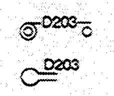
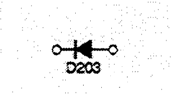
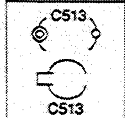
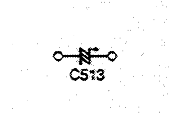
FM/AM TUNER MODULE

FM/AM TUNER MODULE


Q6101
Q6204
Q6102 Q6214
Q6103
Q6104
VR6201
IC6202
IC6201
Q6217
Q6202
Q6201 Q6203
VR6202
ANP1714-B
CMK-P3X
L CH
R CH
GND
CE
DA
CL
L CH MONO
MUTE
TUNE
+12V
+5V
STEREO
PIONEER
To AF CD assy CN9

- This diagram is viewed from the mounted parts side.

NOTE FOR PCB DIAGRAMS:
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between main parts of PCB and schematic diagrams is shown below.

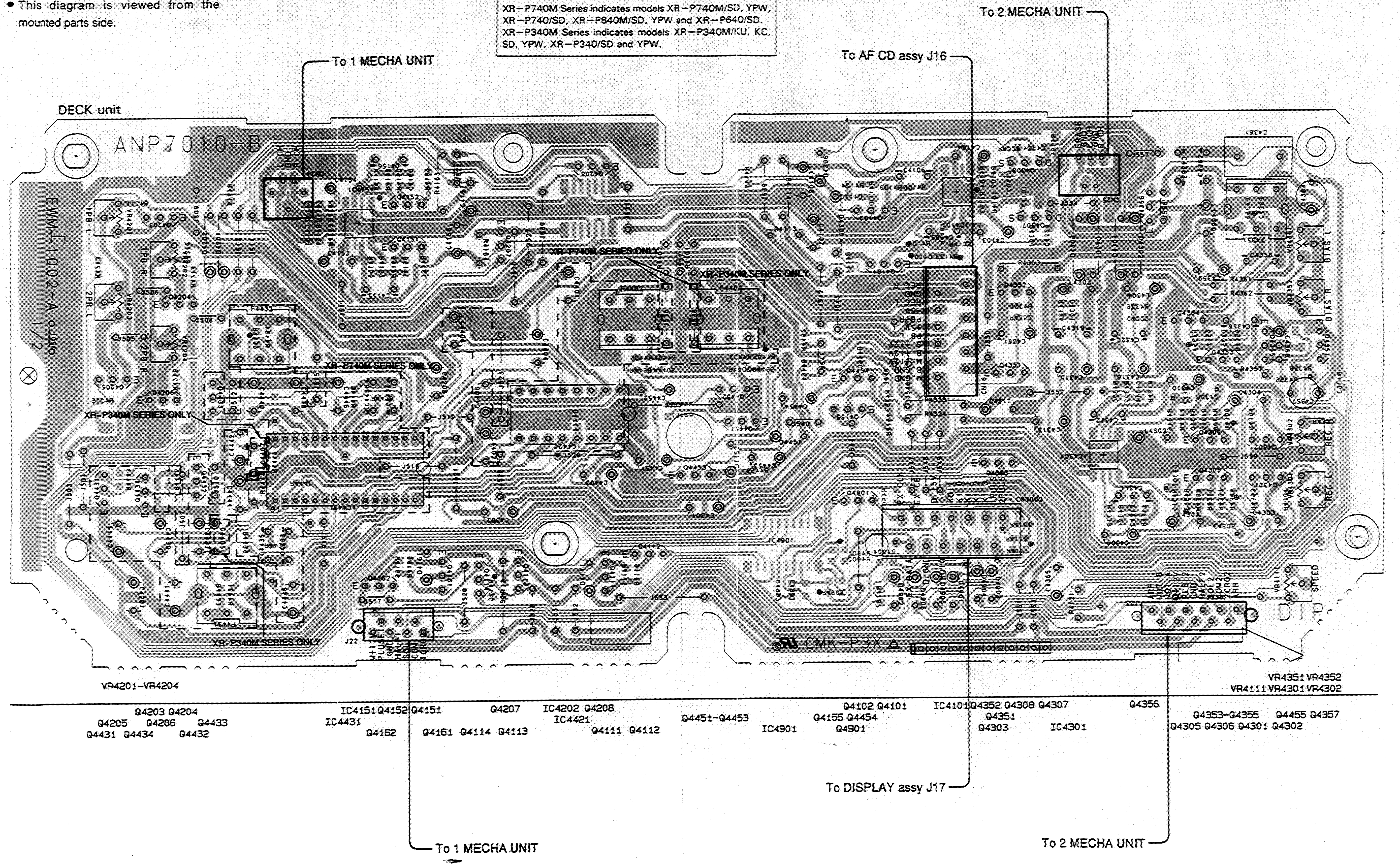
Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Diode
		Capacitor (Polarized)

3. The transistor terminal marked with E or ⊏ shows the emitter.
4. The diode terminal marked with ◎ or ⊂ shows cathode side.
5. The capacitor terminal marked with ◎ or ⊏ shows negative terminal.

3. DECK UNIT

- This diagram is viewed from the mounted parts side.

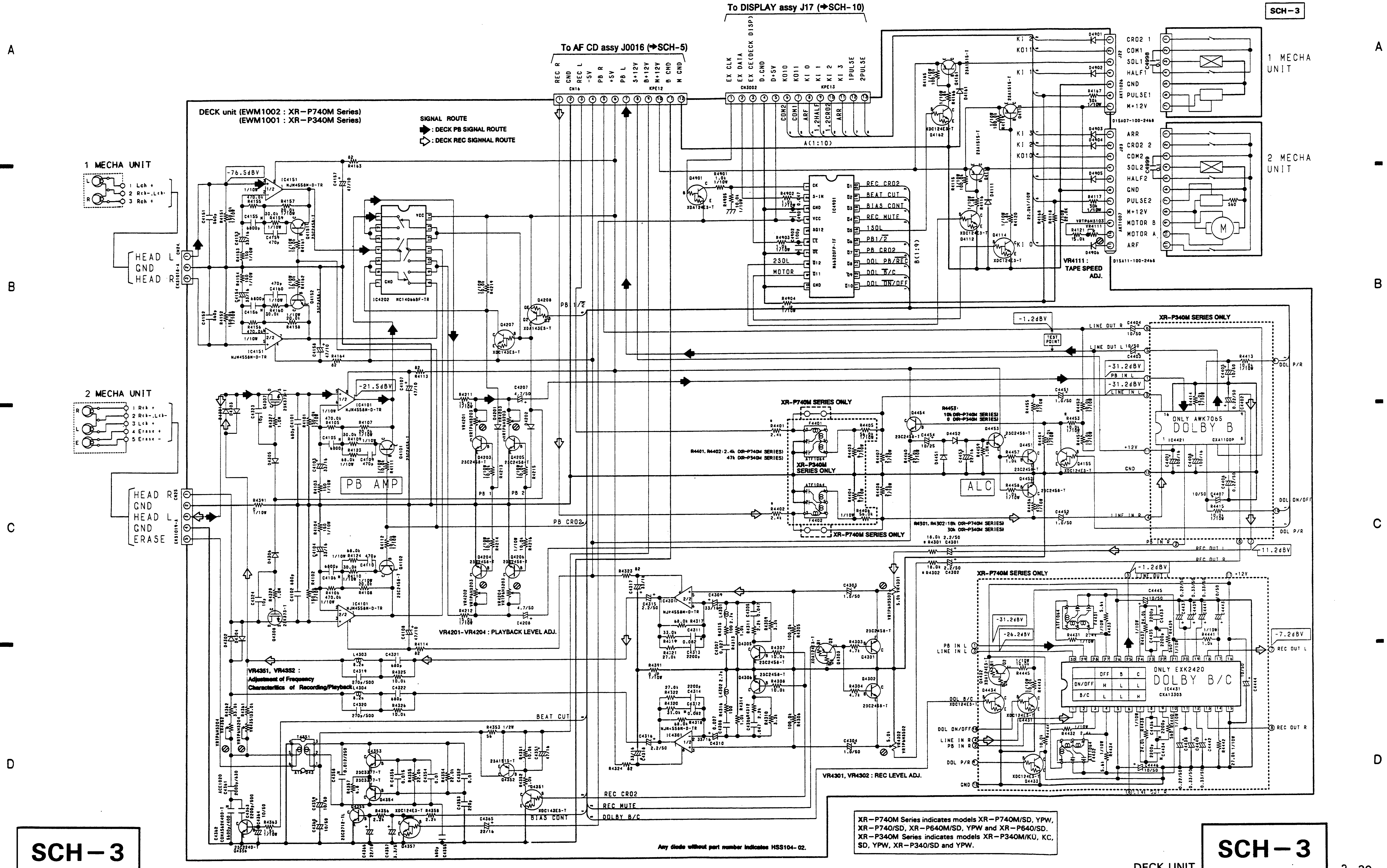
XR−P740M Series indicates models XR−P740M/SD, YPW, XR−P740/SD, XR−P640M/SD, YPW and XR−P640/SD. XR−P340M Series indicates models XR−P340M/KU, KC, SD, YPW, XR−P340/SD and YPW.


To 1 MECHA UNIT
To AF CD assy J16
To 2 MECHA UNIT
DECK unit
ANP7010-B
EWM 1002-A 1/2
XR-P740M SERIES ONLY
XR-P340M SERIES ONLY
XR-P740M SERIES ONLY
XR-P340M SERIES ONLY
XR-P340M SERIES ONLY
CMK-P3X
DIP
VR4201−VR4204
Q4203 Q4204
Q4205 Q4206 Q4433
Q4431 Q4434 Q4432
IC4151 Q4152 Q4151
IC4431
Q4162
Q4207
Q4161 Q4114 Q4113
IC4202 Q4208
IC4421
Q4111 Q4112
Q4451−Q4453
Q4102 Q4101
Q4155 Q4454
IC4901
Q4901
IC4101 Q4352 Q4308 Q4307
Q4351
Q4303
IC4301
Q4356
Q4353−Q4355 Q4455 Q4357
Q4305 Q4306 Q4301 Q4302
VR4351 VR4352
VR4111 VR4301 VR4302
To DISPLAY assy J17
To 1 MECHA UNIT
To 2 MECHA UNIT

NOTE : VOLTAGE AND CURRENT

▭ or ← V :
DC voltage (V) in STOP mode unless otherwise noted.

⇦ mA or ← mA :
DC current in STOP mode unless otherwise noted.

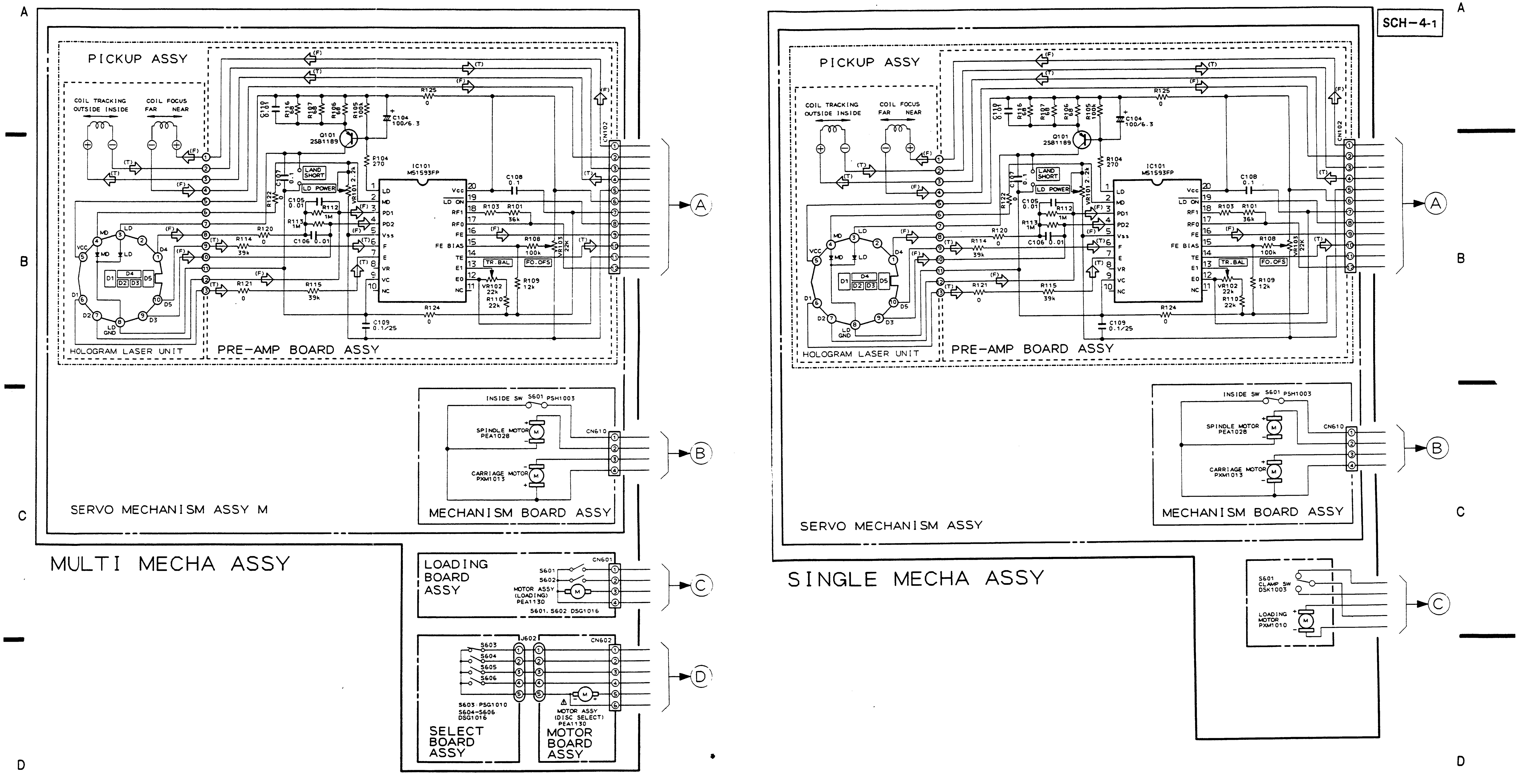

SCH-3
To DISPLAY assy J17 (➔SCH-10)
To AF CD assy J0016 (➔SCH-5)
DECK unit (EWM1002 : XR-P740M Series)
(EWM1001 : XR-P340M Series)
SIGNAL ROUTE
➡ : DECK PB SIGNAL ROUTE
⇨ : DECK REC SIGNNAL ROUTE
1 MECHA UNIT
2 MECHA UNIT
HEAD L
GND
HEAD R
ERASE
PB AMP
ALC
XR-P740M SERIES ONLY
XR-P340M SERIES ONLY
ONLY AWK7065
DOLBY B
IC4421 CXA1100P
ONLY EXK2420
DOLBY B/C
IC4431 CXA1330S
VR4111 : TAPE SPEED ADJ.
VR4201–VR4204 : PLAYBACK LEVEL ADJ.
VR4301, VR4302 : REC LEVEL ADJ.
VR4351, VR4352 : Adjustment of Frequency Characteristics of Recording/Playback
-76.5dBV
-21.5dBV
-1.2dBV
-31.2dBV
-11.2dBV
-26.2dBV
-7.2dBV
TEST POINT
LINE OUT R
LINE OUT L
PB IN L
LINE IN L
LINE IN R
PB IN R
DOL P/R
DOL ON/OFF
DOL B/C
REC OUT L
REC OUT R
BEAT CUT
REC CRO2
REC MUTE
BIAS CONT
DOLBY B/C
PB CRO2
PB 1/2
IC4202 MC14066BF-TR
IC4151 NJM4558M-D-TR
IC4101 NJM4558M-D-TR
IC4301 NJM4558M-D-TR
IC4901
CRO2 1
COM1
SOL1
HALF1
GND
PULSE1
M+12V
ARR
CRO2 2
COM2
SOL2
HALF2
PULSE2
MOTOR B
MOTOR A
ARF
1 MECHA UNIT
2 MECHA UNIT
REC CRO2
BEAT CUT
BIAS CONT
REC MUTE
1SOL
PB1/2
PB CRO2
DOL PB/REC
DOL B/C
DOL ON/OFF
2SOL
MOTOR
Any diode without part number indicates HSS104-02.

XR–P740M Series indicates models XR–P740M/SD, YPW, XR–P740/SD, XR–P640M/SD, YPW and XR–P640/SD.
XR–P340M Series indicates models XR–P340M/KU, KC, SD, YPW, XR–P340/SD and YPW.

SCH-3 DECK UNIT

DECK UNIT **SCH-3**

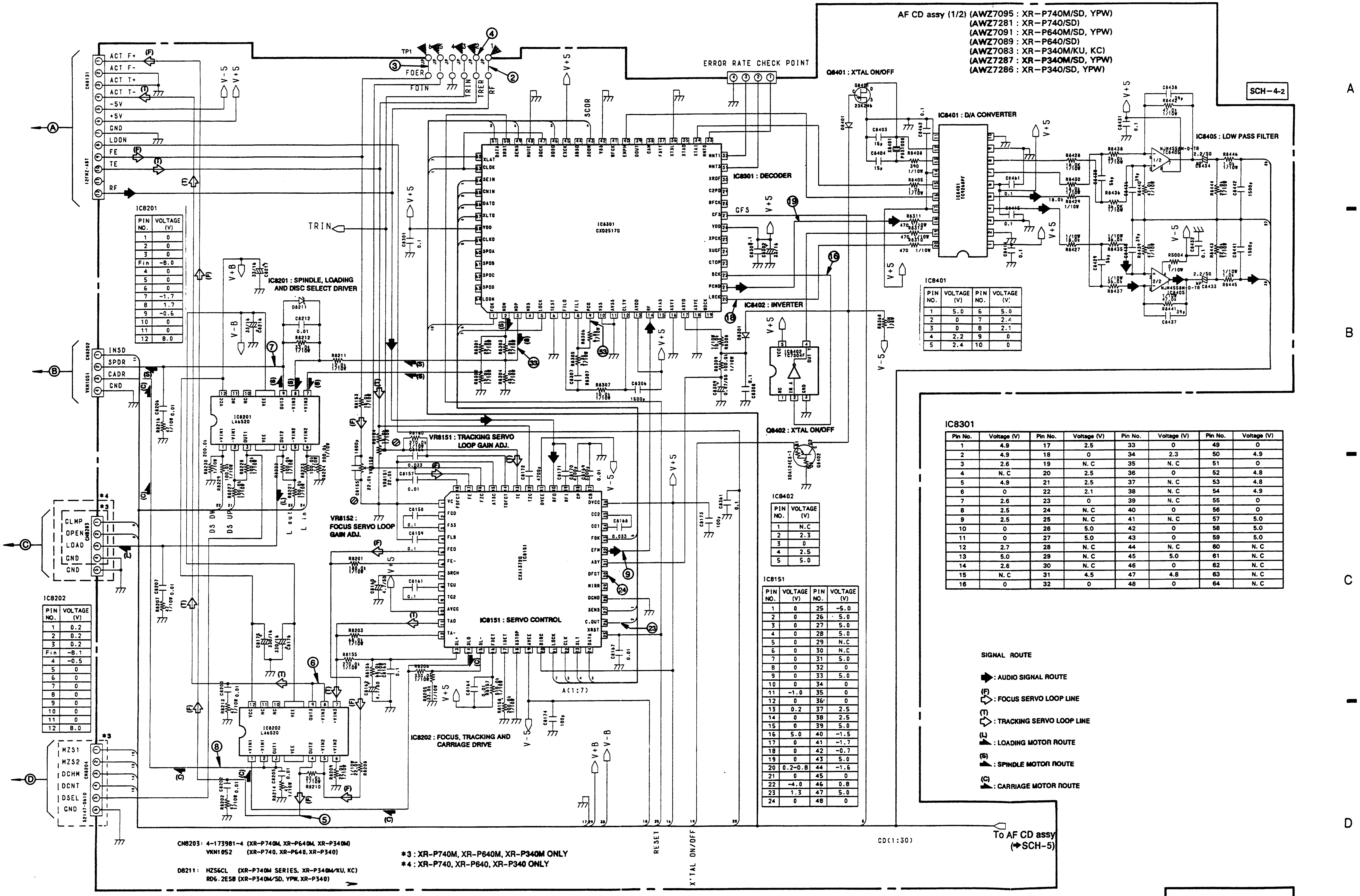
4. AF CD ASSY, VR ASSY, H. P ASSY, SECONDRY TRANS ASSY, MULTI MECHA ASSY AND SINGLE MECHA ASSY


A
B
C
D
SCH-4-1
PICKUP ASSY
COIL TRACKING OUTSIDE INSIDE
COIL FOCUS FAR NEAR
HOLOGRAM LASER UNIT
PRE-AMP BOARD ASSY
IC101 M51593FP
Q101 2SB1189
CN102
LAND SHORT
LD POWER
VR101 2.2k
TR.BAL
FO.OFS
VR102 22k
VR103 22K
C104 100/6.3
C108 0.1
C109 0.1/25
R125 0
R104 270
R103
R101 36k
R108 100k
R109 12k
R110 22k
R124 0
R120 0
R114 0
R121 0
R115 39k
R113 1M
R112 1M
C105 0.01
C106 0.01
LD
MD
PD1
PD2
Vss
F
E
VR
VC
NC
Vcc
LD ON
RF1
RF0
FE
FE BIAS
TE
E1
E0
D1
D2
D3
D4
D5
LD GND
INSIDE SW S601 PSH1003
SPINDLE MOTOR PEA1028
CARRIAGE MOTOR PXM1013
CN610
MECHANISM BOARD ASSY
SERVO MECHANISM ASSY M
SERVO MECHANISM ASSY
MULTI MECHA ASSY
SINGLE MECHA ASSY
LOADING BOARD ASSY
CN601
S601
S602
MOTOR ASSY (LOADING) PEA1130
S601, S602 DSG1016
J602
CN602
S603
S604
S605
S606
S603:PSG1010
S604~S606 DSG1016
MOTOR ASSY (DISC SELECT) PEA1130
SELECT BOARD ASSY
MOTOR BOARD ASSY
S601 CLAMP SW DSK1003
LOADING MOTOR PXM1010
(A)
(B)
(C)
(D)

SCH – 4-1 CD MULTI MECHA ASSY,
CD SINGLE MECHA ASSY

NOTE : VOLTAGE AND CURRENT
▭ or ← V :
DC voltage (V) in PLAY mode unless otherwise noted.
⇦ mA or ← mA :
DC current in PLAY mode unless otherwise noted.
Value in ( ) is DC current in STOP mode.

AF CD assy (1/2) (AWZ7095 : XR−P740M/SD, YPW)
(AWZ7281 : XR−P740/SD)
(AWZ7091 : XR−P640M/SD, YPW)
(AWZ7089 : XR−P640/SD)
(AWZ7083 : XR−P340M/KU, KC)
(AWZ7287 : XR−P340M/SD, YPW)
(AWZ7286 : XR−P340/SD, YPW)


SCH-4-2
ERROR RATE CHECK POINT
Q8401 : X'TAL ON/OFF
IC8401 : D/A CONVERTER
IC8405 : LOW PASS FILTER
IC8301 : DECODER
IC8402 : INVERTER
Q8402 : X'TAL ON/OFF
IC8201 : SPINDLE, LOADING AND DISC SELECT DRIVER
VR8151 : TRACKING SERVO LOOP GAIN ADJ.
VR8152 : FOCUS SERVO LOOP GAIN ADJ.
IC8151 : SERVO CONTROL
IC8202 : FOCUS, TRACKING AND CARRIAGE DRIVE
ACT F+
ACT F−
ACT T+
ACT T−
−5V
+5V
GND
LDON
FE
TE
RF
INSD
SPDR
CADR
GND
CLMP
OPEN
LOAD
GND
GND
MZS1
MZS2
DCHM
DCNT
DSEL
GND
CN8201
CN8202
CN8203
CN8204
TP1
FOER
FOIN
TRIN
TRER
RF
TRIN
SCOR
V+5
V−5
V+B
V−B
DS DW
DS UP
L out
L in
A(1:7)
CD(1:30)
RESET
X'TAL ON/OFF
To AF CD assy (➔SCH-5)
SIGNAL ROUTE
➡ : AUDIO SIGNAL ROUTE
(F) ⇨ : FOCUS SERVO LOOP LINE
(T) ⇨ : TRACKING SERVO LOOP LINE
(L) ◣ : LOADING MOTOR ROUTE
(S) ◣ : SPINDLE MOTOR ROUTE
(C) ◣ : CARRIAGE MOTOR ROUTE
*3
*4

IC8201

PIN NO.	VOLTAGE (V)
1	0
2	0
3	0
Fin	-8.0
4	0
5	0
6	0
7	-1.7
8	1.7
9	-0.6
10	0
11	0
12	8.0

IC8202

PIN NO.	VOLTAGE (V)
1	0.2
2	0.2
3	0.2
Fin	-8.1
4	-0.5
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	8.0

IC8401

PIN NO.	VOLTAGE (V)	PIN NO.	VOLTAGE (V)
1	5.0	6	5.0
2	0	7	2.4
3	0	8	2.1
4	2.2	9	0
5	2.4	10	0

IC8402

PIN NO.	VOLTAGE (V)
1	N.C
2	2.3
3	0
4	2.5
5	5.0

IC8151

PIN NO.	VOLTAGE (V)	PIN NO.	VOLTAGE (V)
1	0	25	-5.0
2	0	26	5.0
3	0	27	5.0
4	0	28	5.0
5	0	29	N.C
6	0	30	N.C
7	0	31	5.0
8	0	32	0
9	0	33	5.0
10	0	34	0
11	-1.0	35	0
12	0	36	0
13	0.2	37	2.5
14	0	38	2.5
15	0	39	5.0
16	5.0	40	-1.5
17	0	41	-1.7
18	0	42	-0.7
19	0	43	5.0
20	0.2-0.8	44	-1.6
21	0	45	0
22	-4.0	46	0.8
23	1.3	47	5.0
24	0	48	0

IC8301

Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)
1	4.9	17	2.5	33	0	49	0
2	4.9	18	0	34	2.3	50	4.9
3	2.6	19	N. C	35	N. C	51	0
4	N. C	20	2.5	36	0	52	4.8
5	4.9	21	2.5	37	N. C	53	4.8
6	0	22	2.1	38	N. C	54	4.9
7	2.6	23	0	39	N. C	55	0
8	2.5	24	N. C	40	0	56	0
9	2.5	25	N. C	41	N. C	57	5.0
10	0	26	5.0	42	0	58	5.0
11	0	27	5.0	43	0	59	5.0
12	2.7	28	N. C	44	N. C	60	N. C
13	5.0	29	N. C	45	5.0	61	N. C
14	2.6	30	N. C	46	0	62	N. C
15	N. C	31	4.5	47	4.8	63	N. C
16	0	32	0	48	0	64	N. C

CN8203: 4-173981-4 (XR-P740M, XR-P640M, XR-P340M)
VKN1052 (XR-P740, XR-P640, XR-P340)

D8211: HZS6CL (XR-P740M SERIES, XR-P340M/KU, KC)
RD6.2ESB (XR-P340M/SD, YPW, XR-P340)

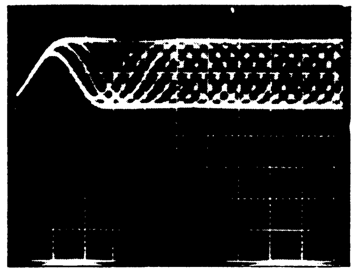
*3 : XR-P740M, XR-P640M, XR-P340M ONLY
*4 : XR-P740, XR-P640, XR-P340 ONLY

Waveforms

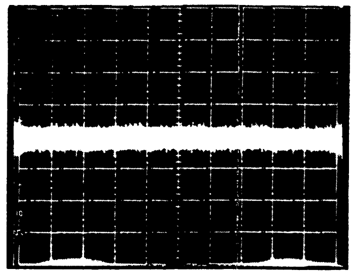
Note: The encircled numbers denote measuring point in the schematic disgram.

*1 50T-JUMP: After switching to the pause mode, press the manual search key.
*2 FOCUS-IN: Press the key without loading a disc.

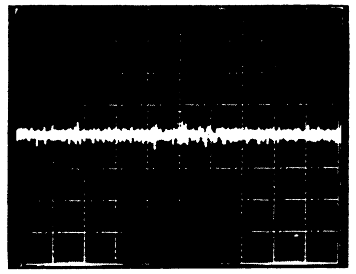
② TP1-Pin1: PLAY MODE (RF)
500mV/div 500nsec/div



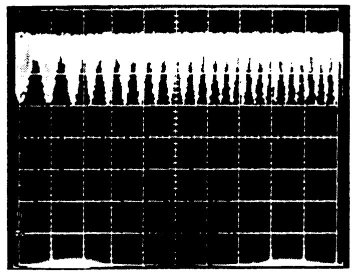
④ TP1-Pin2: PLAY MODE (TRER)
1V/div 1msec/div



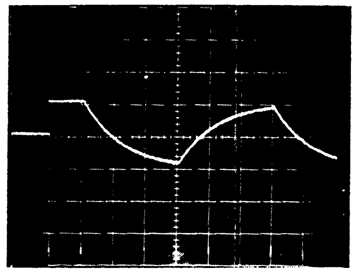
⑥ IC8202-Pin9: PLAY MODE (TRDR)
500mV/div 1msec/div



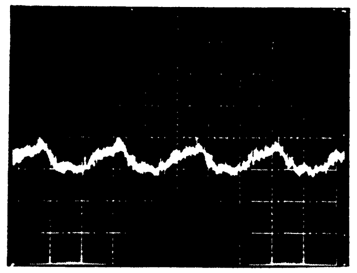
② TP1-Pin1: TRACK SEARCH MODE (RF)
500mV/div 200μsec/div



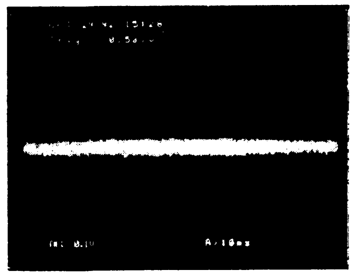
⑤ IC8202-Pin4: FOCUS-IN (*2) MODE (FODR)
1V/div 200msec/div



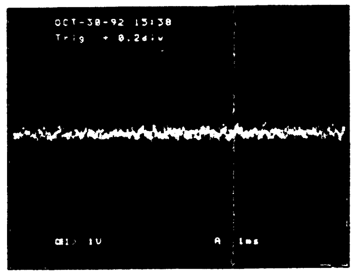
⑦ IC8201-Pin9: PLAY MODE (SPDR)
1V/div 50msec/div



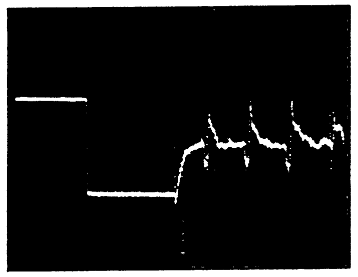
③ TP1-Pin6: PLAY MODE (FOER)
100mV/div 10msec/div



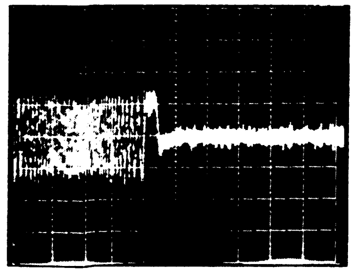
⑤ IC8202-Pin4: PLAY MODE (FODR)
1V/div 1msec/div



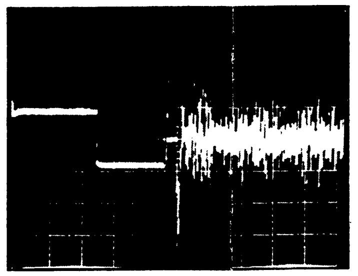
⑦ IC8201-Pin9: TRACK SEARCH MODE (SPDR)
2V/div 50msec/div



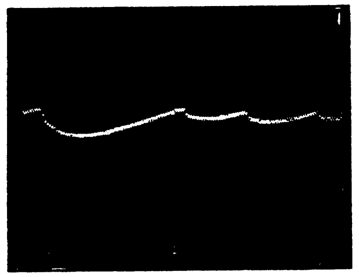
④ TP1-Pin2: 50T-JUMP (*1) MODE (TRER)
1V/div 1msec/div



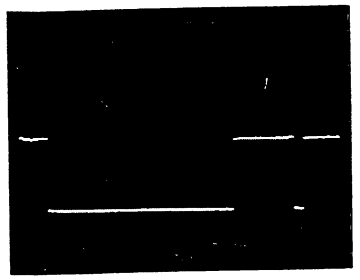
⑥ IC8202-Pin9: 50T-JUMP (*1) MODE (TRDR)
500mV/div 1msec/div



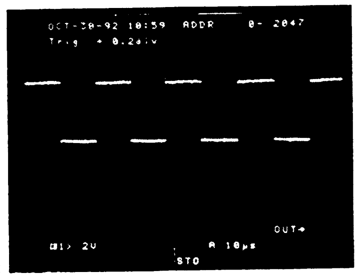
⑧ IC8202-Pin3: PLAY MODE (CADR)
0.2V/div 2sec/div



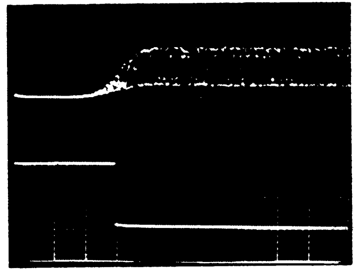
⑧ IC8202-Pin3: TRACK SEARCH MODE (CADR)
2V/div 200msec/div



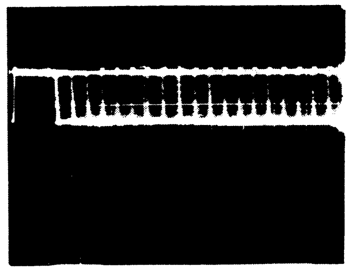
⑱ IC8301-Pin20: PLAY MODE (1kHz) (LRCK)
2V/div 10μsec/div



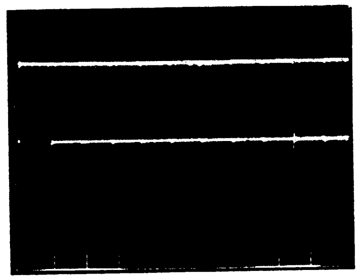
㉔ : PLAY MODE
Upper: TP1-Pin1 (RF) 1V/div
Lower: IC8151-Pin30 (DFCT)
5V/div 200μsec/div



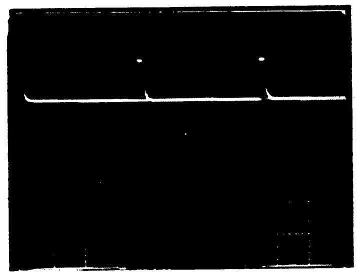
⑨ IC8151-Pin32: PLAY MODE (EFM)
2V/div 500nsec/div



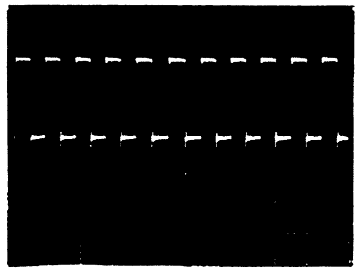
⑲ IC8301-Pin21: PLAY MODE (1kHz) (PCMD)
2V/div 500nsec/div



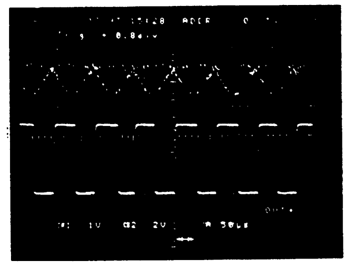
㉝ IC8301-Pin3: PLAY MODE (MDP)
2V/div 2μsec/div



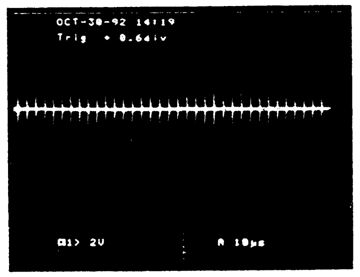
⑯ IC8301-Pin22: PLAY MODE (1kHz) (BCK)
2V/div 500nsec/div

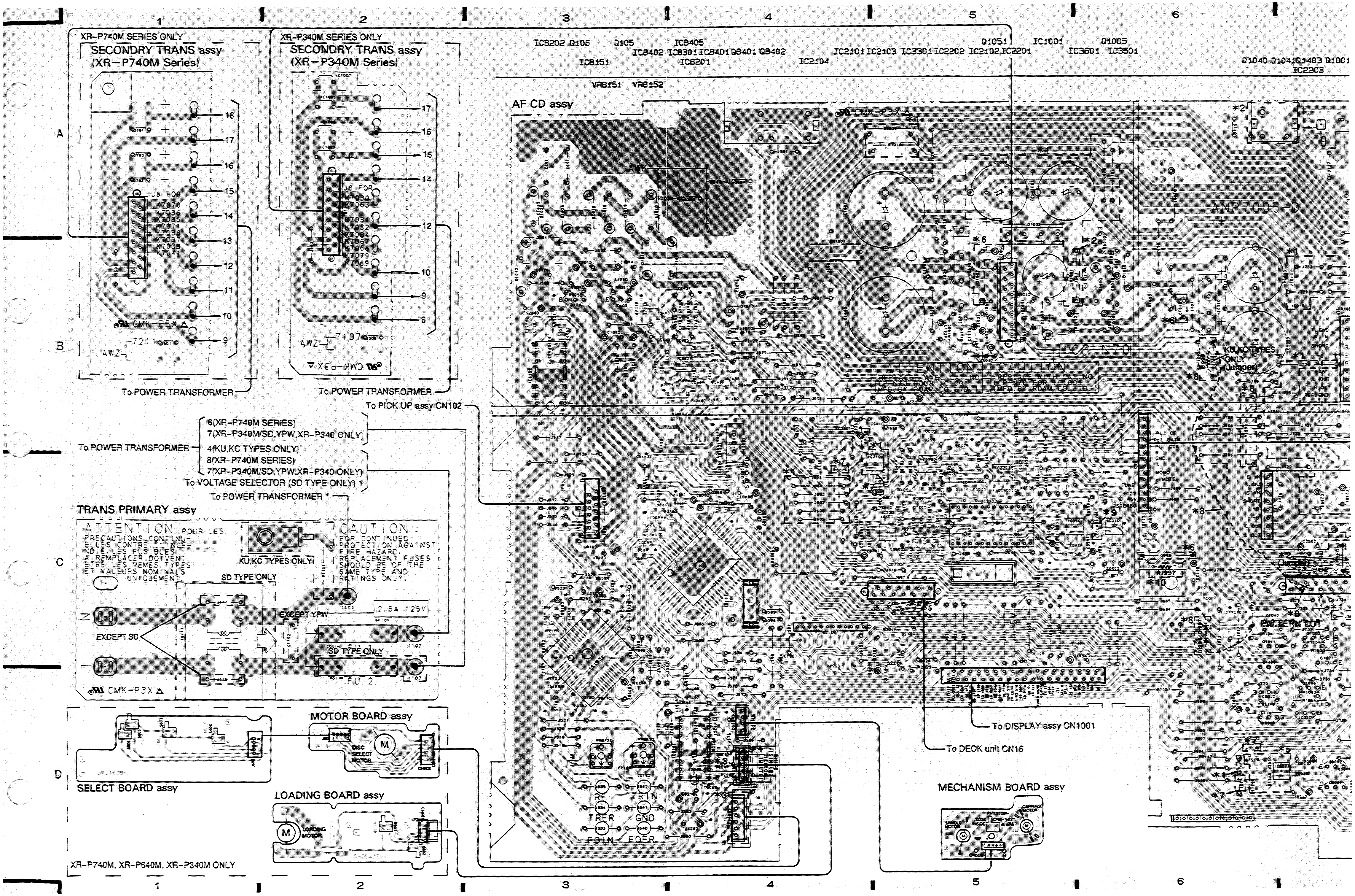


㉓ : TRACK SEARCH MODE
Upper: TP1-Pin1 (RF) 1V/div
Lower: IC8151-Pin26 (C. OUT)
2V/div 50μsec/div



(53) IC8301-Pin9: PLAY MODE (PCO)
2V/div 10μsec/div



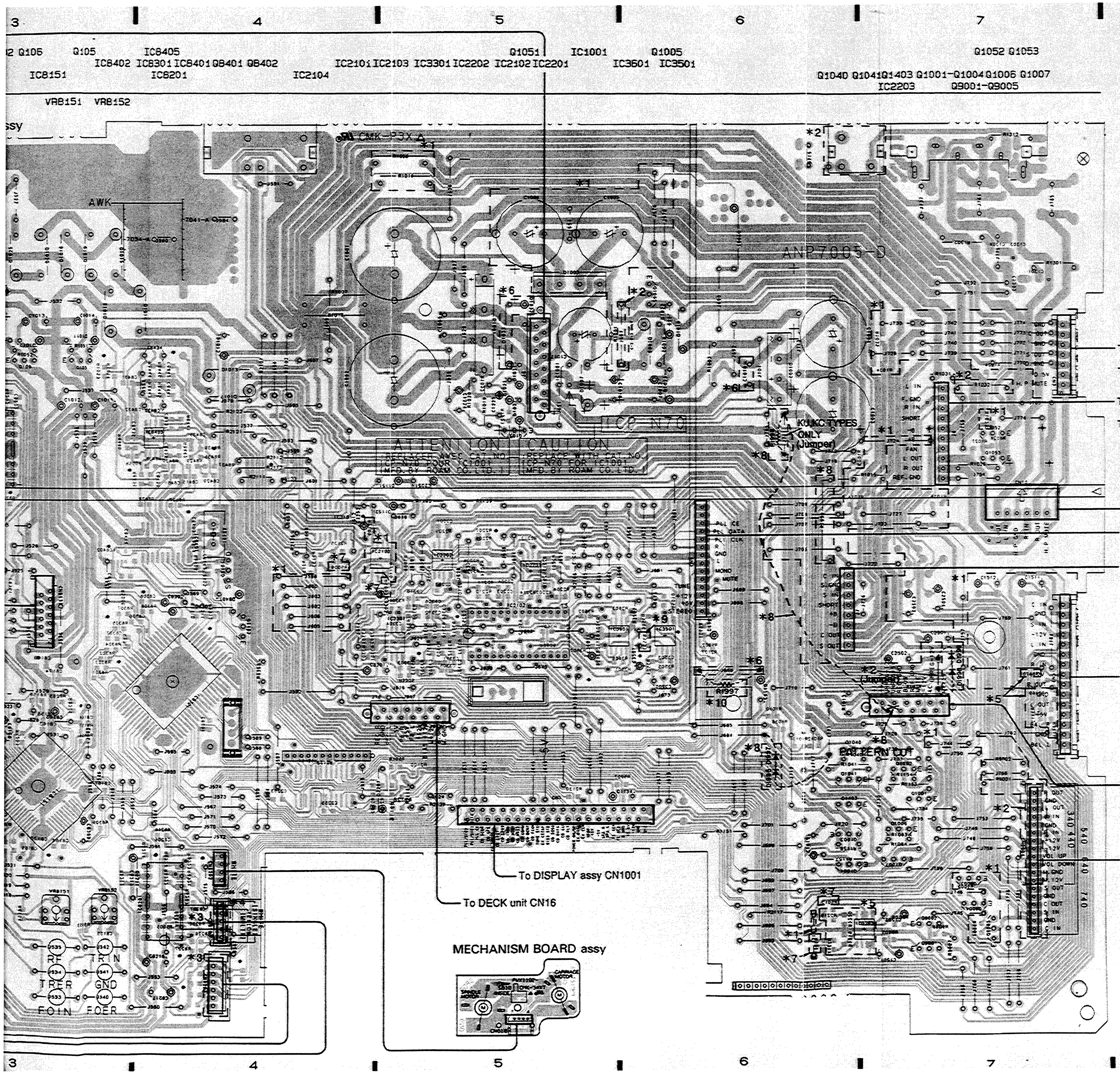

XR-P740M SERIES ONLY
SECONDRY TRANS assy
(XR−P740M Series)
XR-P340M SERIES ONLY
SECONDRY TRANS assy
(XR−P340M Series)
J8 FOR
K7070
K7036
K7035
K7071
K7038
K7037
K7039
K7041
K7030
K7063
K7031
K7032
K7034
K7067
K7068
K7079
K7069
CMK-P3X
AWZ-7211
AWZ-7107
To POWER TRANSFORMER
To POWER TRANSFORMER
To PICK UP assy CN102
To POWER TRANSFORMER
8(XR-P740M SERIES)
7(XR-P340M/SD,YPW,XR-P340 ONLY)
4(KU,KC TYPES ONLY)
8(XR-P740M SERIES)
7(XR-P340M/SD,YPW,XR-P340 ONLY)
To VOLTAGE SELECTOR (SD TYPE ONLY) 1
To POWER TRANSFORMER 1
TRANS PRIMARY assy
ATTENTION: POUR LES PRECAUTIONS CONTINUES CONTRE L'INCENDIE LES FUSIBLES A REMPLACER DOIVENT ETRE LES MEMES TYPES ET VALEURS NOMINALS UNIQUEMENT.
CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACEMENT FUSES SHOULD BE OF THE SAME TYPE AND RATINGS ONLY.
KU,KC TYPES ONLY
SD TYPE ONLY
EXCEPT YPW
2.5A 125V
EXCEPT SD
SD TYPE ONLY
FU 2
CMK-P3X
SELECT BOARD assy
MOTOR BOARD assy
DISC SELECT MOTOR
LOADING BOARD assy
LOADING MOTOR
XR-P740M, XR-P640M, XR-P340M ONLY
IC8202 Q106 Q105 IC8405 IC8402 IC8301 IC8401 Q8401 Q8402 IC8151 IC8201
VR8151 VR8152
IC2101 IC2103 IC3301 IC2202 IC2102 IC2201 IC2104
Q1051 IC1001 Q1005 IC3601 IC3501
Q1040 Q1041 Q1403 Q1001 IC2203
AF CD assy
AWK
CMK-P3X
ANP7005-D
ATTENTION REMPLACER AVEC CAT NO. ICP-N70 POUR IC1001 MFD. BY ROAM CO.,LTD.
CAUTION REPLACE WITH CAT NO. ICP-N70 FOR IC1001 MFD. BY ROAM CO.,LTD.
ICP-N70
KU,KC TYPES ONLY (Jumper)
*1 *2 *3 *5 *6 *7 *8 *9 *10
(Jumper)
PATTERN CUT
RF TRER FOIN TRIN GND FOER
To DISPLAY assy CN1001
To DECK unit CN16
MECHANISM BOARD assy
1 2 3 4 5 6
A B C D

XR-P740M, XR-P640M, XR-P340M
XR-P740, XR-P640, XR-P340

PCB-3

- *1 : XR-P740M, XR-P740, XR-P640M, XR-P640 ONLY
- *2 : XR-P340M, XR-P340 ONLY
- *3 : XR-P740M, XR-P640M, XR-P340M ONLY
- *4 : XR-P740, XR-P640, XR-P340 ONLY
- *5 : XR-P740M, XR-P740 ONLY
- *6 : XR-P340M/SD, YPW, XR-P340 ONLY
- *7 : EXCEPT XR-P740M, XR-P740
- *8 : SD, YPW TYPES ONLY
- *9 : EXCEPT XR-P340M/SD, YPW
- *10 : XR-P740M SERIES, XR-P340M /KU,KC ONLY

XR−P740M Series indicates models XR−P740M/SD, YPW, XR−P740/SD, XR−P640M/SD, YPW and XR−P640/SD. XR−P340M Series indicates models XR−P340M/KU, KC, SD, YPW, XR−P340/SD and YPW.


3
4
5
6
7
2 Q106 Q105 IC8405 Q1051 IC1001 Q1005 Q1052 Q1053
IC8402 IC8301 IC8401 Q8401 Q8402 IC2101 IC2103 IC3301 IC2202 IC2102 IC2201 IC3601 IC3501
IC8151 IC8201 IC2104 Q1040 Q1041 Q1403 Q1001−Q1004 Q1006 Q1007
IC2203 Q9001−Q9005
VR8151 VR8152
ssy
CMK−P3X
AWK
ANP7005−D
ATTENTION
CAUTION
KU,KC TYPES ONLY (Jumper)
(Jumper)
PATTERN CUT
*1
*2
*3
*5
*6
*7
*8
*9
*10
RF
TRIN
TRER
GND
FOIN
FOER
340
440
540
640
740

To PROLOGIC assy CN1003
(XR−P740M,XR−P740)
To DOL SURR assy CN1003
(XR−P640M,XR−P640)

To FRONT assy FOR 100W
(XR−P740M SERIES)
To FRONT assy FOR 50W
(XR−P340M SERIES)
CN7502

To FM/AM TUNER MODULE CN6201

To REAR, PWR, PRTEC assy CN7102

To PROLOGIC assy CN1002
(XR−P740M,XR−P740)
To DOL SURR assy CN1002
(XR−P640M,XR−P640)

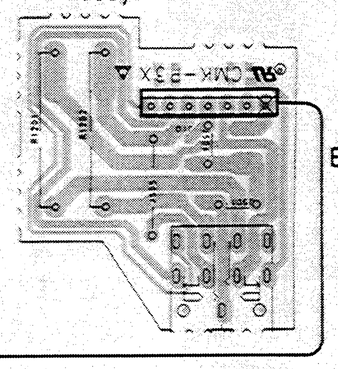
To REAR, PWR, PRTEC assy
(XR−P740M SERIES)
To PWR, PRTEC assy
(XR−P340M SERIES)
CN7101

To DISPLAY assy CN1001

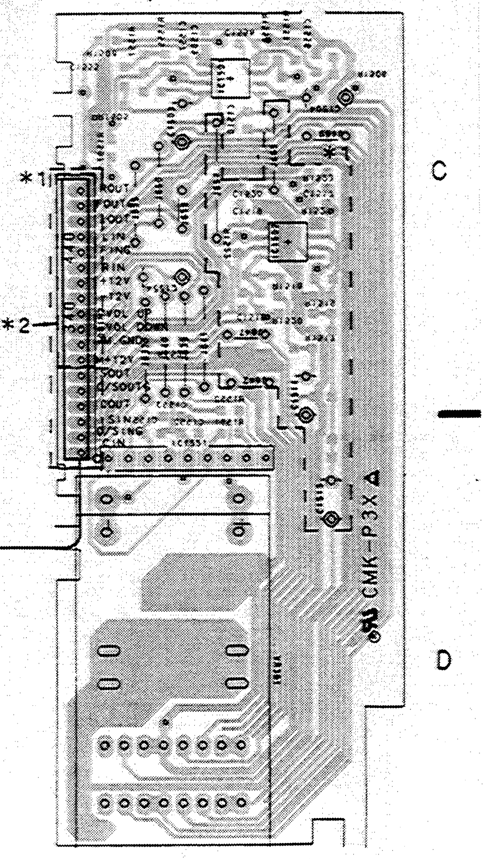
To DECK unit CN16

MECHANISM BOARD assy

H. P assy



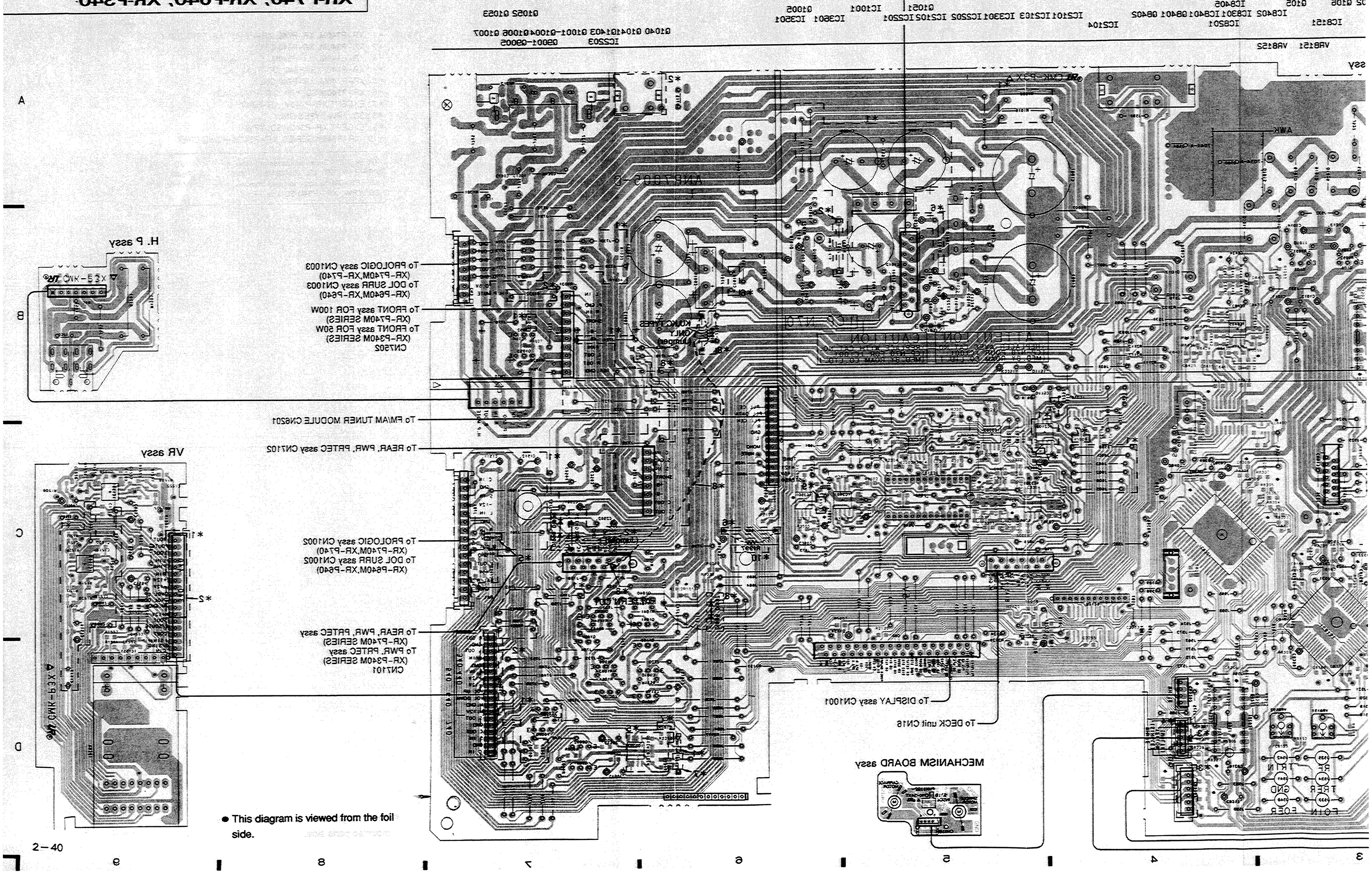
VR assy


*1
*2
CMK−P3X
C
D

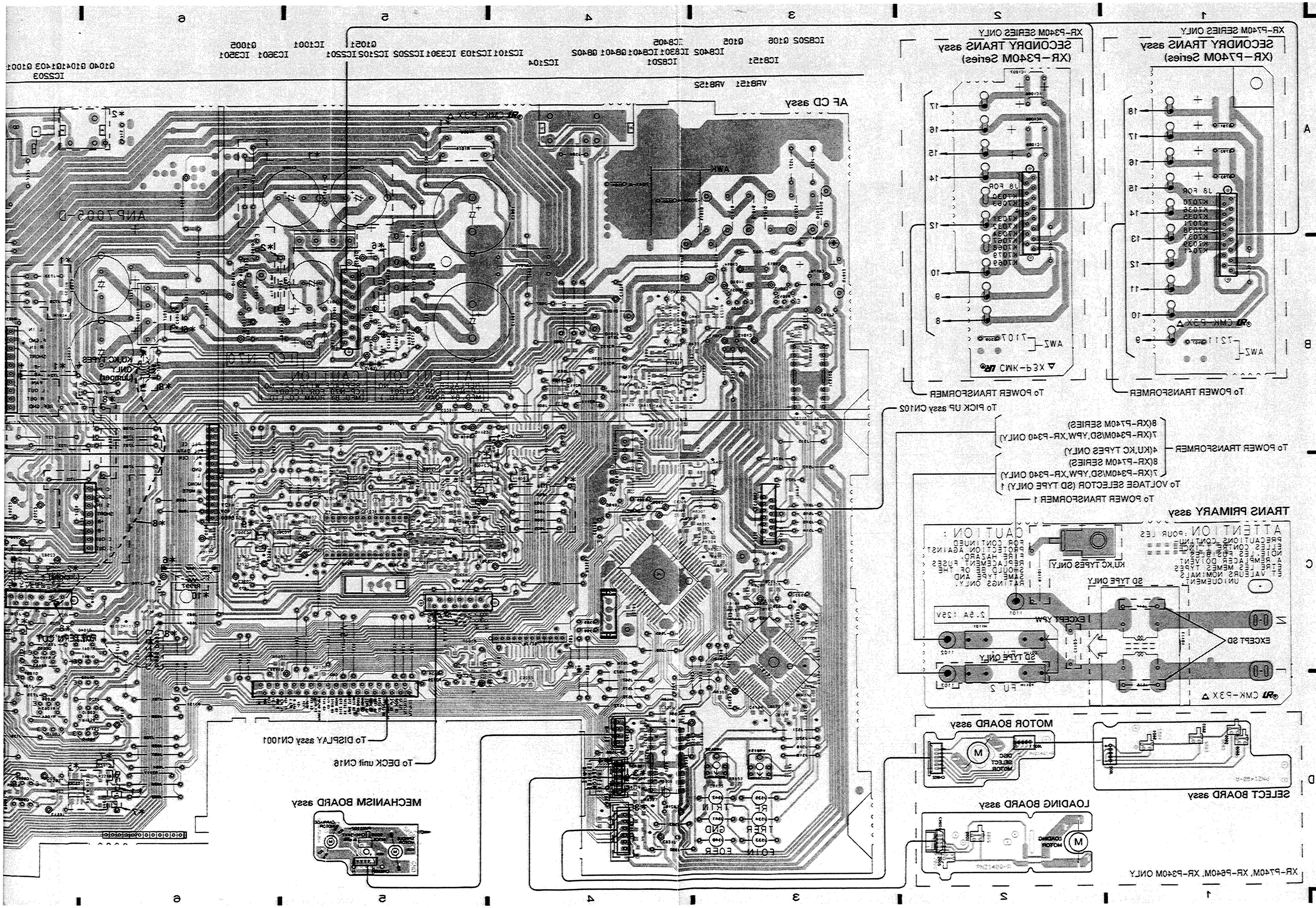
- This diagram is viewed from the mounted parts side.

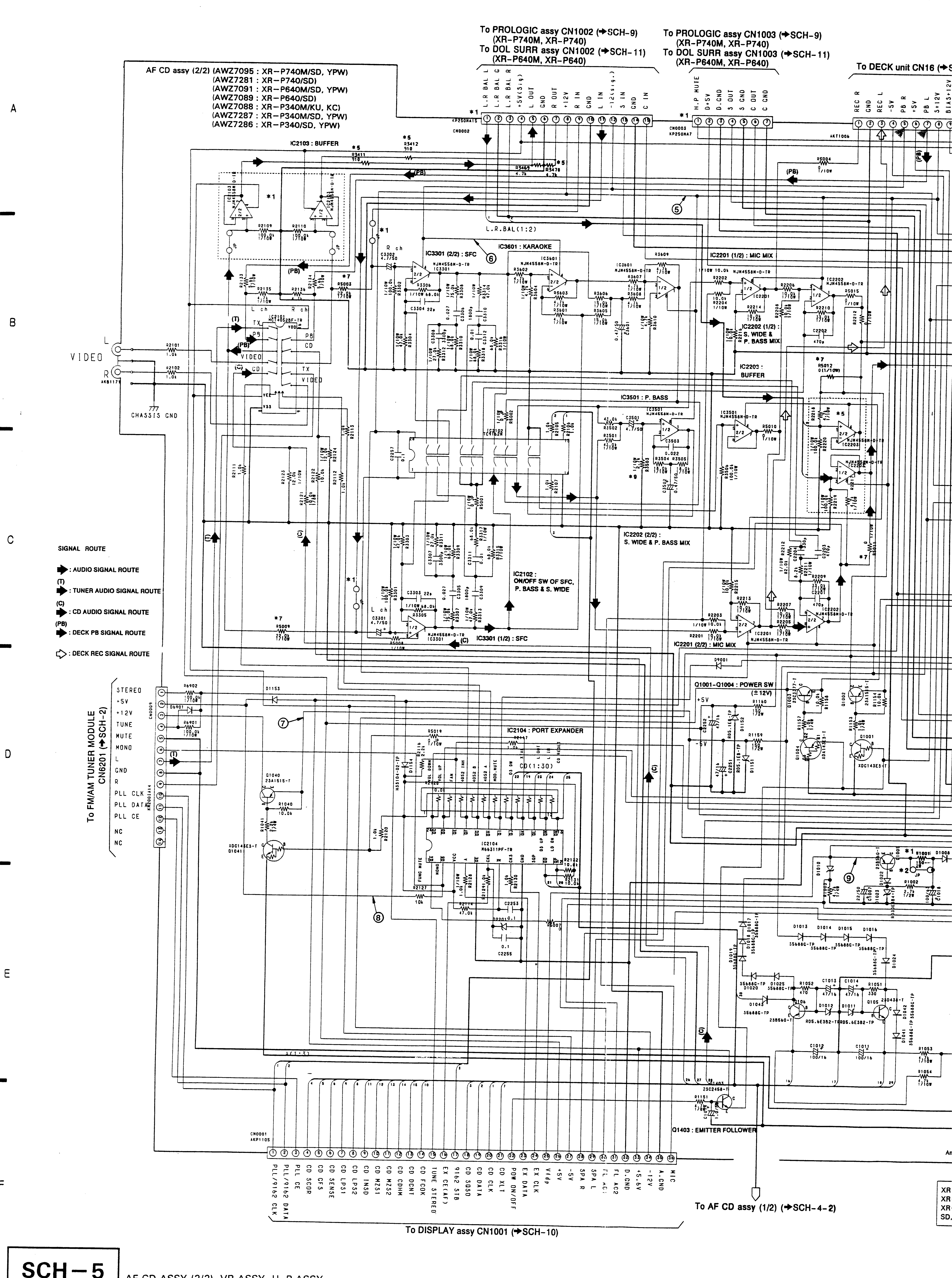
8
9

XR-P740M, XR-P640M, XR-P340M
XR-P740, XR-P640, XR-P340


7
6
5
4
3
Q1053 Q1052
Q1040 Q1041 Q1403 Q1001–Q1004 Q1006 Q1007
IC2203 Q9001–Q9005
Q1005 Q1006
IC3601 IC3501
IC1001
Q1051
IC2201 IC2102 IC2202 IC3301 IC2103 IC2101
IC2104
IC8405
IC8402 IC8301 IC8401 Q8401 Q8402
IC8201
Q105 Q106
IC8151
VR8151 VR8152
A
B
C
D
H. P assy
VR assy
To PROLOGIC assy CN1003
(XR-P740M,XR-P740)
To DOL SURR assy CN1003
(XR-P640M,XR-P640)
To FRONT assy FOR 100W
(XR-P740M SERIES)
To FRONT assy FOR 50W
(XR-P340M SERIES)
CN7502
To FM/AM TUNER MODULE CN6201
To REAR, PWR, PRTEC assy CN7102
To PROLOGIC assy CN1002
(XR-P740M,XR-P740)
To DOL SURR assy CN1002
(XR-P640M,XR-P640)
To REAR, PWR, PRTEC assy
(XR-P740M SERIES)
To PWR, PRTEC assy
(XR-P340M SERIES)
CN7101
To DISPLAY assy CN1001
To DECK unit CN16
MECHANISM BOARD assy
*1
*2
9
8
7
6
5
4
3

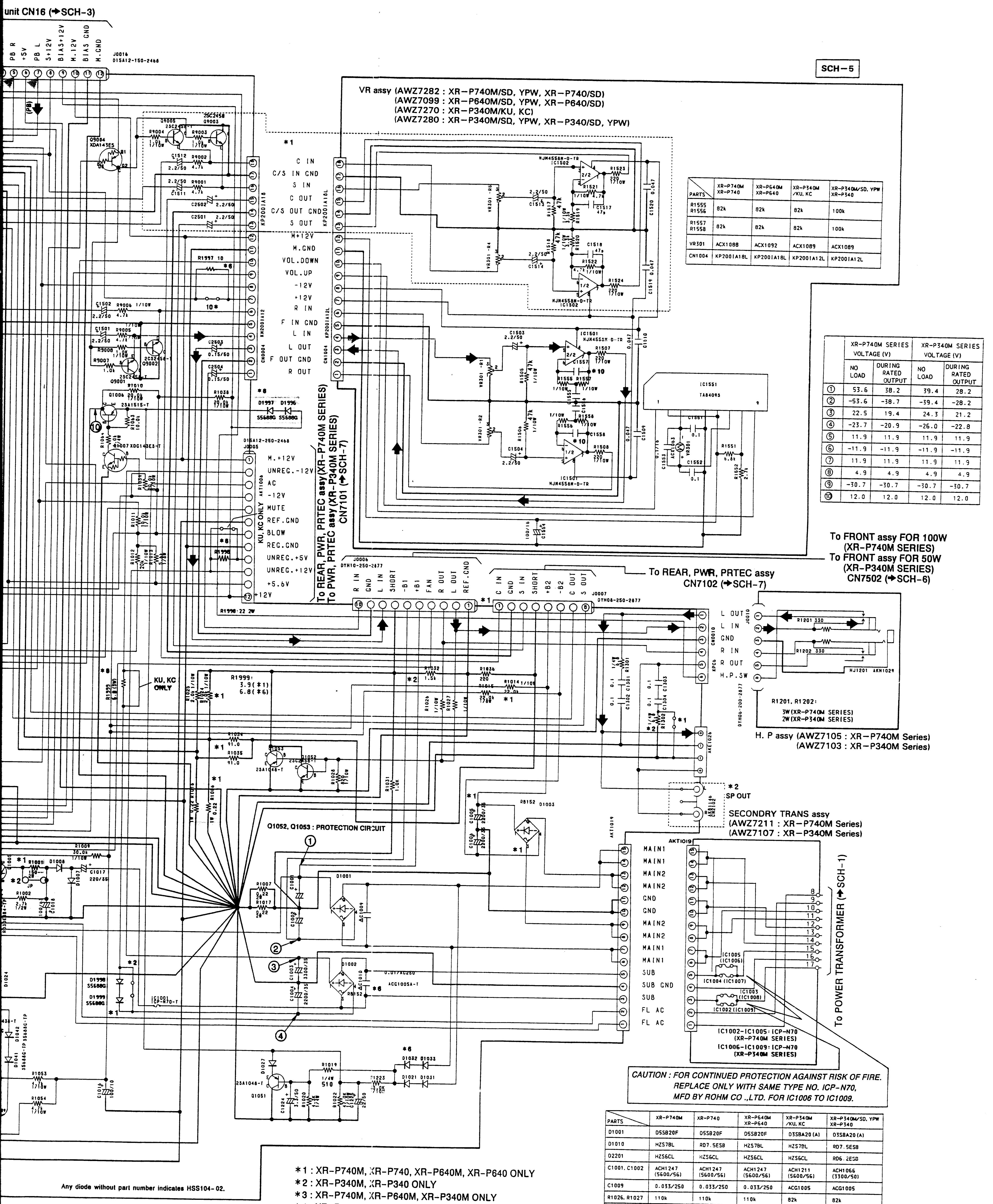
- This diagram is viewed from the foil side.


AF CD assy
XR-P740M SERIES ONLY
SECONDRY TRANS assy
(XR-P740M Series)
XR-P340M SERIES ONLY
SECONDRY TRANS assy
(XR-P340M Series)
To POWER TRANSFORMER
To POWER TRANSFORMER
To PICK UP assy CN102
8(XR-P740M SERIES)
7(XR-P340M/SD,YPW,XR-P340 ONLY)
4(KU,KC TYPES ONLY)
To POWER TRANSFORMER
8(XR-P740M SERIES)
7(XR-P340M/SD,YPW,XR-P340 ONLY)
To VOLTAGE SELECTOR (SD TYPE ONLY) 1
To POWER TRANSFORMER 1
TRANS PRIMARY assy
KU,KC TYPES ONLY
SD TYPE ONLY
EXCEPT YPW
EXCEPT SD
SD TYPE ONLY
2.5A 125V
MOTOR BOARD assy
SELECT BOARD assy
LOADING BOARD assy
XR-P740M, XR-P640M, XR-P340M ONLY
MECHANISM BOARD assy
To DISPLAY assy CN1001
To DECK unit CN16
A
B
C
D
1
2
3
4
5
6


1
2
3
4
5
A
B
C
D
E
F
To PROLOGIC assy CN1002 (➜SCH-9)
(XR-P740M, XR-P740)
To DOL SURR assy CN1002 (➜SCH-11)
(XR-P640M, XR-P640)
To PROLOGIC assy CN1003 (➜SCH-9)
(XR-P740M, XR-P740)
To DOL SURR assy CN1003 (➜SCH-11)
(XR-P640M, XR-P640)
To DECK unit CN16
AF CD assy (2/2) (AWZ7095 : XR-P740M/SD, YPW)
(AWZ7281 : XR-P740/SD)
(AWZ7091 : XR-P640M/SD, YPW)
(AWZ7089 : XR-P640/SD)
(AWZ7088 : XR-P340M/KU, KC)
(AWZ7287 : XR-P340M/SD, YPW)
(AWZ7286 : XR-P340/SD, YPW)
L.R BAL L
L.R BAL G
L.R BAL G
L.R BAL R
+5V(Sig)
L OUT
GND
R OUT
+12V
R IN
GND
L IN
-12(sig.)
S IN
GND
C IN
H.P MUTE
D+5V
D.GND
S OUT
S GND
C OUT
C GND
REC R
GND
REC L
-5V
PB R
+5V
PB L
CN0002
KP250NA15
CN0003
KP250NA7
AKT1006
IC2103 : BUFFER
IC3301 (2/2) : SFC
IC3601 : KARAOKE
IC2201 (1/2) : MIC MIX
IC2202 (1/2) : S. WIDE & P. BASS MIX
IC2203 : BUFFER
IC3501 : P. BASS
IC2202 (2/2) : S. WIDE & P. BASS MIX
IC2102 : ON/OFF SW OF SFC, P. BASS & S. WIDE
IC3301 (1/2) : SFC
IC2201 (2/2) : MIC MIX
IC2104 : PORT EXPANDER
Q1001-Q1004 : POWER SW (±12V)
Q1403 : EMITTER FOLLOWER
IC2101 HCF4052BF-TR
TX
PB
CD
VIDEO
VEE
VSS
VDD
L ch
R ch
VIDEO
L
R
AKB1171
CHASSIS GND
L.R.BAL(1:2)
CD(1:30)
SIGNAL ROUTE
➜ : AUDIO SIGNAL ROUTE
(T) ➜ : TUNER AUDIO SIGNAL ROUTE
(C) ➜ : CD AUDIO SIGNAL ROUTE
(PB) ➜ : DECK PB SIGNAL ROUTE
⇨ : DECK REC SIGNAL ROUTE
To FM/AM TUNER MODULE CN6201 (➜SCH-2)
STEREO
+5V
+12V
TUNE
MUTE
MONO
L
GND
R
PLL CLK
PLL DATA
PLL CE
NC
NC
CN0009
KM200NA14
CN0001
AKP1105
PLL/9162 CLK
PLL/9162 DATA
PLL CE
CD SCOR
CD GFS
CD SENSE
CD LPS1
CD LPS2
CD INSD
CD HZS1
CD HZS2
CD CDHM
CD DCNT
CD FCOK
TUNE STEREO
EX CE(AF)
9162 STB
CD SOSO
CD DATA
CD CLK
CD XLT
POW ON/OFF
EX DATA
EX CLK
Vfdp
+5V
-5V
SPA R
SPA L
FL AC1
FL AC2
D.GND
+5.6V
-12V
A.GND
MIC
To DISPLAY assy CN1001 (➜SCH-10)
To AF CD assy (1/2) (➜SCH-4-2)
⑤
⑥
⑦
⑧
⑨
*1
*2
*5
*7
*9

SCH－5

AF CD ASSY (2/2), VR ASSY, H. P ASSY,
SECONDRY TRANS ASSY


unit CN16 (➔SCH-3)
PB R
+5V
PB L
S+12V
BIAS+12V
M.12V
BIAS GND
M.GND
J0016
01SA12-150-2466
SCH−5
VR assy (AWZ7282 : XR−P740M/SD, YPW, XR−P740/SD)
(AWZ7099 : XR−P640M/SD, YPW, XR−P640/SD)
(AWZ7270 : XR−P340M/KU, KC)
(AWZ7280 : XR−P340M/SD, YPW, XR−P340/SD, YPW)
C IN
C/S IN GND
S IN
C OUT
C/S OUT GND
S OUT
M+12V
M.GND
VOL.DOWN
VOL.UP
-12V
+12V
R IN
F IN GND
L IN
L OUT
F OUT GND
R OUT
KP2001A18
KP2001A18L
KP2001A12L
CN1004
CN0004
M.+12V
UNREG.-12V
AC
-12V
MUTE
REF.GND
BLOW
REG.GND
UNREG.+5V
UNREG.+12V
+5.6V
+12V
KU, KC ONLY
J0005
01SA12-250-2466
To REAR, PWR, PRTEC assy(XR-P740M SERIES)
To PWR, PRTEC assy(XR-P340M SERIES)
CN7101 (➔SCH-7)
J0006
DTH10-250-2877
R IN
GND
L IN
SHORT
-B1
+B1
FAN
R OUT
L OUT
REF.GND
C IN
GND
S IN
SHORT
+B2
-B2
C OUT
S OUT
J0007
DTH08-250-2877
To REAR, PWR, PRTEC assy
CN7102 (➔SCH-7)
IC1551
TA8409S
IC1501
NJM4558M-D-TR
IC1502
NJM4558M-D-TR
VR301
To FRONT assy FOR 100W
(XR−P740M SERIES)
To FRONT assy FOR 50W
(XR−P340M SERIES)
CN7502 (➔SCH-6)
L OUT
L IN
GND
R IN
R OUT
H.P.SW
J0010
CN0010
KPC6
R1201 330
R1202 330
HJ1201 AKN1029
R1201, R1202:
3W(XR−P740M SERIES)
2W(XR−P340M SERIES)
H. P assy (AWZ7105 : XR−P740M Series)
(AWZ7103 : XR−P340M Series)
KU, KC ONLY
R1999:
3.9(*1)
6.8(*6)
SP OUT
SECONDRY TRANS assy
(AWZ7211 : XR−P740M Series)
(AWZ7107 : XR−P340M Series)
Q1052, Q1053 : PROTECTION CIRCUIT
AKT1019
MAIN1
MAIN1
MAIN2
MAIN2
GND
GND
MAIN2
MAIN2
MAIN1
MAIN1
SUB
SUB GND
SUB
FL AC
FL AC
IC1005 (IC1006)
IC1004 (IC1007)
IC1003 (IC1008)
IC1002 (IC1009)
IC1002−IC1005: ICP−N70
(XR−P740M SERIES)
IC1006−IC1009: ICP−N70
(XR−P340M SERIES)
To POWER TRANSFORMER (➔SCH-1)
D1001
D1002
D1003
Q1051
Q1052
Q1053
Q9001
Q9002
Q9003
Q9004
Q9005
Q1006
Q1007
Any diode without part number indicates HSS104-02.

PARTS	XR−P740M XR−P740	XR−P640M XR−P640	XR−P340M /KU, KC	XR−P340M/SD, YPW XR−P340
R1555 R1556	82k	82k	82k	100k
R1557 R1558	82k	82k	82k	100k
VR301	ACX1088	ACX1092	ACX1089	ACX1089
CN1004	KP2001A18L	KP2001A18L	KP2001A12L	KP2001A12L

	XR−P740M SERIES VOLTAGE (V)		XR−P340M SERIES VOLTAGE (V)	
	NO LOAD	DURING RATED OUTPUT	NO LOAD	DURING RATED OUTPUT
①	53.6	38.2	39.4	28.2
②	−53.6	−38.7	−39.4	−28.2
③	22.5	19.4	24.3	21.2
④	−23.7	−20.9	−26.0	−22.8
⑤	11.9	11.9	11.9	11.9
⑥	−11.9	−11.9	−11.9	−11.9
⑦	11.9	11.9	11.9	11.9
⑧	4.9	4.9	4.9	4.9
⑨	−30.7	−30.7	−30.7	−30.7
⑩	12.0	12.0	12.0	12.0

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. ICP−N70, MFD BY ROHM CO .,LTD. FOR IC1006 TO IC1009.

PARTS	XR−P740M	XR−P740	XR−P640M XR−P640	XR−P340M /KU, KC	XR−P340M/SD, YPW XR−P340
D1001	D5SB20F	D5SB20F	D5SB20F	D3SBA20 (A)	D3SBA20 (A)
D1010	HZS7BL	RD7.5ESB	HZS7BL	HZS7BL	RD7.5ESB
D2201	HZS6CL	HZS6CL	HZS6CL	HZS6CL	RD6.2ESB
C1001, C1002	ACH1247 (5600/56)	ACH1247 (5600/56)	ACH1247 (5600/56)	ACH1211 (5600/56)	ACH1066 (3300/50)
C1009	0.033/250	0.033/250	0.033/250	ACG1005	ACG1005
R1026, R1027	110k	110k	110k	82k	82k
R1223	33k	33k	33k	30k	33k
CN004	KM2001A18	KM2001A18	KM2001A18	KM2001A12	KM2001A12

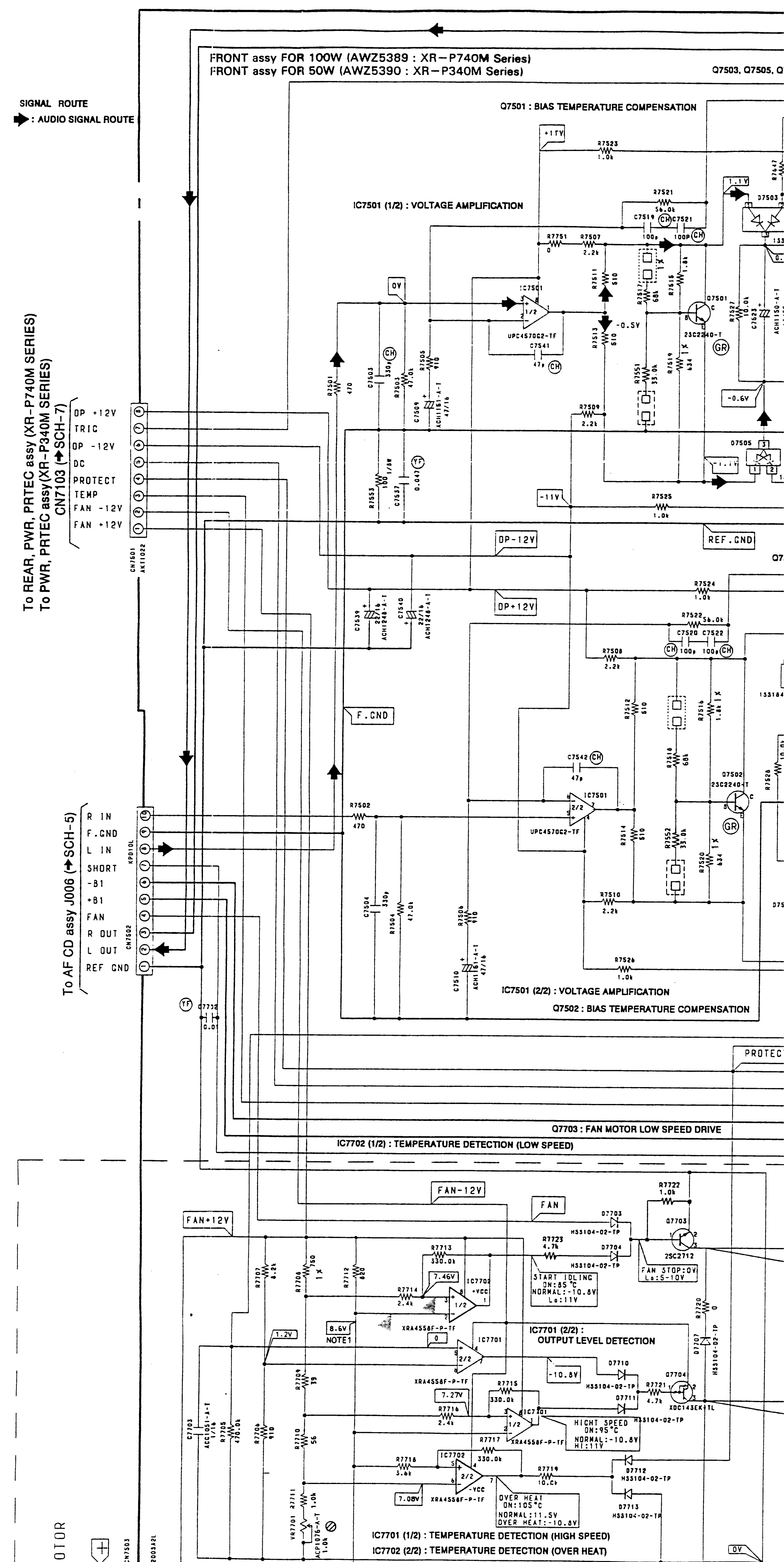
XR−P740M Series indicates models XR−P740M/SD, YPW, XR−P740/SD, XR−P640M/SD, YPW and XR−P640/SD. XR−P340M Series indicates models XR−P340M/KU, KC, SD, YPW, XR−P340/SD and YPW.

*1 : XR−P740M, XR−P740, XR−P640M, XR−P640 ONLY
*2 : XR−P340M, XR−P340 ONLY
*3 : XR−P740M, XR−P640M, XR−P340M ONLY
*4 : XR−P740, XR−P640, XR−P340 ONLY
*5 : XR−P740M, XR−P740 ONLY
*6 : XR−P340M/SD, YPW, XR−P340 ONLY
*7 : EXCEPT XR−P740M, XR−P740
*8 : SD, YPW TYPES ONLY
*9 : EXCEPT XR−P340M/SD, YPW
*10 : XR−P740M SERIES, XR−P340M /KU,KC ONLY

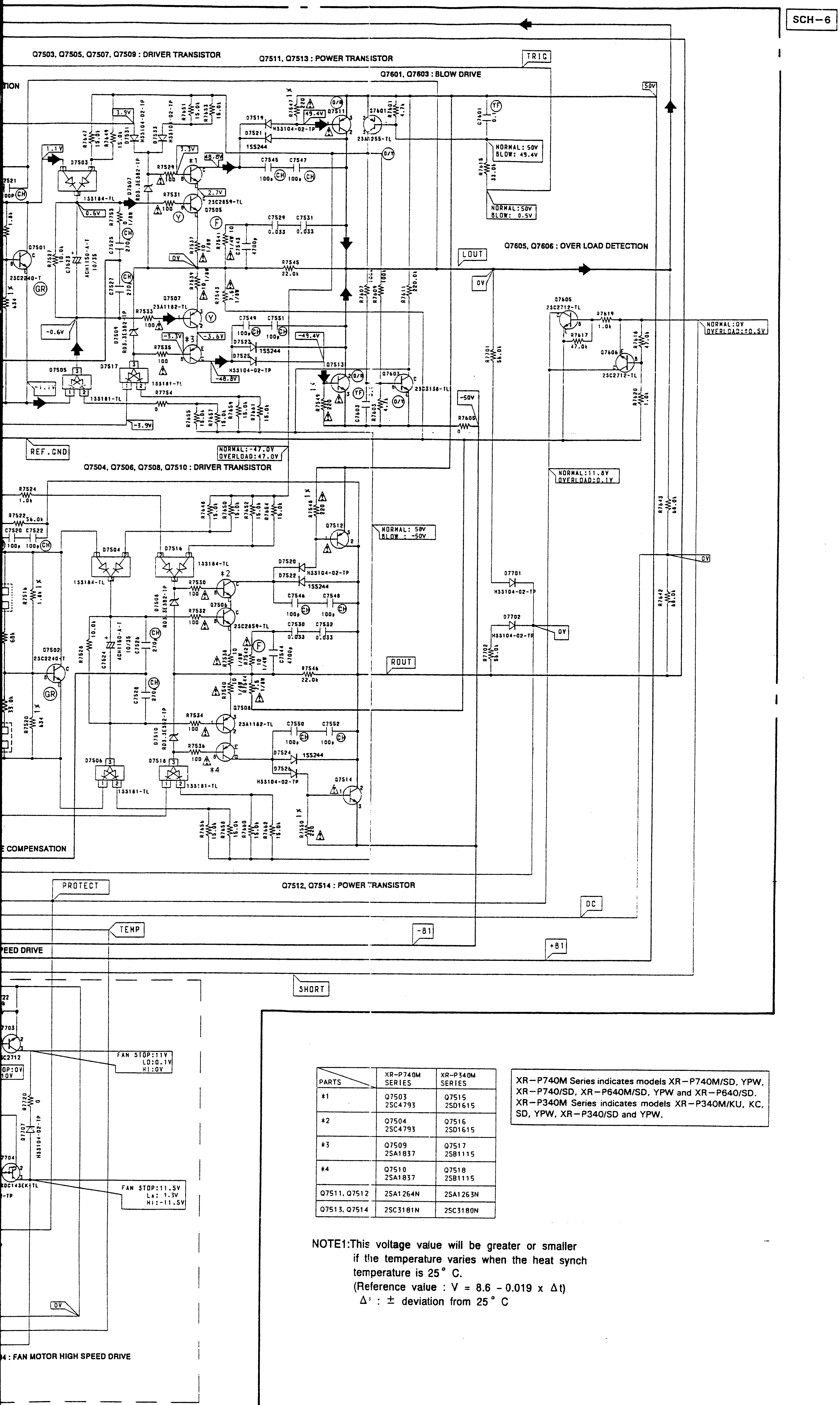
AF CD ASSY (2/2), VR ASSY, H. P ASSY,
SECONDRY TRANS ASSY

SCH−5

5. FRONT ASSY FOR 100W (XR−P740M Series) AND FRONT ASSY FOR 50W (XR−P340M Series)


SIGNAL ROUTE
: AUDIO SIGNAL ROUTE
FRONT assy FOR 100W (AWZ5389 : XR−P740M Series)
FRONT assy FOR 50W (AWZ5390 : XR−P340M Series)
Q7503, Q7505, Q
Q7501 : BIAS TEMPERATURE COMPENSATION
IC7501 (1/2) : VOLTAGE AMPLIFICATION
+11V
1.1V
0V
-0.5V
-0.6V
-11V
REF.GND
DP-12V
DP+12V
F.GND
To REAR, PWR, PRTEC assy (XR−P740M SERIES)
To PWR, PRTEC assy (XR−P340M SERIES)
CN7103 (→SCH−7)
DP +12V
TRIG
DP -12V
DC
PROTECT
TEMP
FAN -12V
FAN +12V
CN7501
AKP1022
To AF CD assy J006 (→SCH−5)
R IN
F.GND
L IN
SHORT
-B1
+B1
FAN
R OUT
L OUT
REF GND
CN7502
KPD10L
IC7501
1/2
2/2
UPC4570G2-TF
Q7501
Q7502
2SC2240-T
GR
CH
YF
D7503
D7505
ACH1150-A-T
ACH1248-A-T
ACH1181-A-T
IC7501 (2/2) : VOLTAGE AMPLIFICATION
Q7502 : BIAS TEMPERATURE COMPENSATION
PROTEC
Q7703 : FAN MOTOR LOW SPEED DRIVE
IC7702 (1/2) : TEMPERATURE DETECTION (LOW SPEED)
FAN+12V
FAN-12V
FAN
D7703
D7704
H33104-02-TP
Q7703
2SC2712
START IDLING
ON:85°C
NORMAL:-10.8V
Lo:11V
FAN STOP:0V
Lo:5-10V
7.46V
IC7702
1/2
XRA4558F-P-TF
8.6V
NOTE1
0
1.2V
IC7701
2/2
IC7701 (2/2) : OUTPUT LEVEL DETECTION
-10.8V
D7710
D7711
Q7704
XDC143EK-TL
7.27V
IC7701
1/2
HIGHT SPEED
ON:95°C
NORMAL:-10.8V
HI:11V
IC7702
2/2
7.08V
OVER HEAT
ON:105°C
NORMAL:11.5V
OVER HEAT:-10.8V
D7712
D7713
VR7701
ACP1076-A-T
IC7701 (1/2) : TEMPERATURE DETECTION (HIGH SPEED)
IC7702 (2/2) : TEMPERATURE DETECTION (OVER HEAT)
0V
TO FAN MOTOR
CN7503
KM200NA2L
+12V
Q7704 : FAN MOTOR HIGH SPE
COOLING FAN CONTROL
R7501 470
R7502 470
R7503 47.0k
R7504 47.0k
R7505 910
R7506 910
R7507 2.2k
R7508 2.2k
R7509 2.2k
R7510 2.2k
R7511 510
R7512 510
R7513 510
R7514 510
R7517 68k
R7518 68k
R7521 56.0k
R7522 56.0k
R7523 1.0k
R7524 1.0k
R7525 1.0k
R7526 1.0k
R7551 33.0k
R7552 33.0k
R7553 100 1/4W
R7751 0
C7503 330p
C7504 330p
C7509 47/16
C7510 47/16
C7519 100p
C7520 100p
C7521 100P
C7522 100p
C7537 0.047
C7539 22/16
C7540 22/16
C7541 47p
C7542 47p
C7702 0.1
C7703 ACE1051-A-T
C7712 0.01
R7707 8.2k
R7708 1k
R7712 820
R7713 330.0k
R7714 2.4k
R7715 330.0k
R7716 2.4k
R7717 330.0k
R7718 3.6k
R7719 10.0k
R7721 4.7k
R7722 1.0k
R7723 4.7k
R7709 39
R7710 56
R7711 1.0k
R7705 470.0k
R7706 910
R7720 0
D7707 H33104-02-TP

FRONT ASSY FOR 100W
(XR−P740M Series),
FRONT ASSY FOR 50W
(XR−P340M Series)


SCH−6
Q7503, Q7505, Q7507, Q7509 : DRIVER TRANSISTOR
Q7511, Q7513 : POWER TRANSISTOR
Q7601, Q7603 : BLOW DRIVE
TRIG
50V
NORMAL: 50V
BLOW: 49.4V
NORMAL: 50V
BLOW: 0.5V
Q7605, Q7606 : OVER LOAD DETECTION
LOUT
0V
NORMAL: 0V
OVERLOAD: +0.5V
-50V
REF. GND
NORMAL: -47.0V
OVERLOAD: 47.0V
Q7504, Q7506, Q7508, Q7510 : DRIVER TRANSISTOR
NORMAL: 11.8V
OVERLOAD: 0.1V
NORMAL: 50V
BLOW: -50V
ROUT
COMPENSATION
PROTECT
Q7512, Q7514 : POWER TRANSISTOR
DC
TEMP
-B1
+B1
SPEED DRIVE
SHORT
FAN STOP: 11V
LO: 0.1V
HI: 0V
FAN STOP: 11.5V
Lo: 1.3V
Hi: -11.5V
0V
: FAN MOTOR HIGH SPEED DRIVE
3.9V
1.1V
3.3V
48.6V
2.7V
0.6V
49.4V
-0.6V
-3.3V
-3.6V
-49.4V
-48.8V
-3.9V
*1
*2
*3
*4

PARTS	XR-P740M SERIES	XR-P340M SERIES
*1	Q7503 2SC4793	Q7515 2SD1615
*2	Q7504 2SC4793	Q7516 2SD1615
*3	Q7509 2SA1837	Q7517 2SB1115
*4	Q7510 2SA1837	Q7518 2SB1115
Q7511, Q7512	2SA1264N	2SA1263N
Q7513, Q7514	2SC3181N	2SC3180N

XR−P740M Series indicates models XR−P740M/SD, YPW, XR−P740/SD, XR−P640M/SD, YPW and XR−P640/SD. XR−P340M Series indicates models XR−P340M/KU, KC, SD, YPW, XR−P340/SD and YPW.

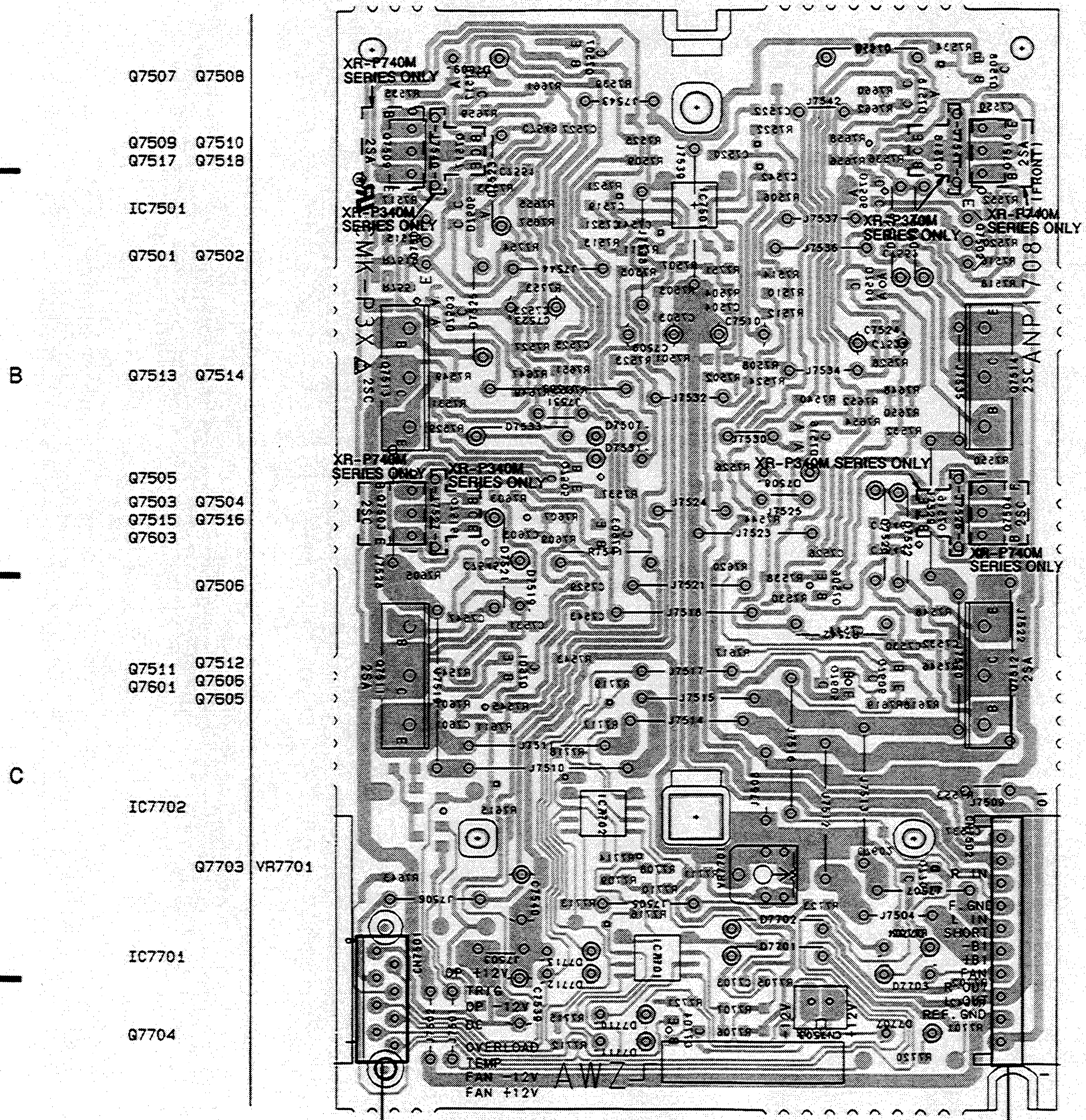
NOTE1:This voltage value will be greater or smaller
if the temperature varies when the heat synch
temperature is 25° C.
(Reference value : V = 8.6 - 0.019 x Δt)
Δt : ± deviation from 25° C

FRONT ASSY FOR 100W
(XR−P740M Series),
FRONT ASSY FOR 50W
(XR−P340M Series)

SCH−6

XR−P740M Series indicates models XR−P740M/SD, YPW, XR−P740/SD, XR−P640M/SD, YPW and XR−P640/SD.
XR−P340M Series indicates models XR−P340M/KU, KC, SD, YPW, XR−P340/SD and YPW.

FRONT assy FOR 100W (XR−P740M Series)
FRONT assy FOR 50W (XR−P340M Series)


A
B
C
D
Q7507 Q7508
Q7509 Q7510
Q7517 Q7518
IC7501
Q7501 Q7502
Q7513 Q7514
Q7505
Q7503 Q7504
Q7515 Q7516
Q7603
Q7506
Q7511 Q7512
Q7601 Q7606
Q7605
IC7702
Q7703 VR7701
IC7701
Q7704
XR-P740M SERIES ONLY
XR-P340M SERIES ONLY
XR-P340M SERIES ONLY
XR-P740M SERIES ONLY
XR-P740M SERIES ONLY
XR-P340M SERIES ONLY
XR-P340M SERIES ONLY
XR-P740M SERIES ONLY
MK-P3X
ANP1708
(FRONT)
2SA
2SC
IC7501
IC7702
IC7701
VR7701
CN7801
R IN
F.GND
L IN
SHORT
-B1
+B1
FAN
R OUT
L OUT
REF.GND
OP +12V
TRIG
OP -12V
BE
OVERLOAD
TEMP
FAN -12V
FAN +12V
AWZ
-12V
+12V
D7701
D7702
J7504
J7509
J7510
J7514
J7515
J7517
J7518
J7521
J7523
J7524
J7530
J7532
J7534
J7536
J7537
J7542

To REAR, PWR, PRTEC assy
(XR−P740M SERIES)
To PWR, PRTEC assy
(XR−P340M SERIES)
CN7103

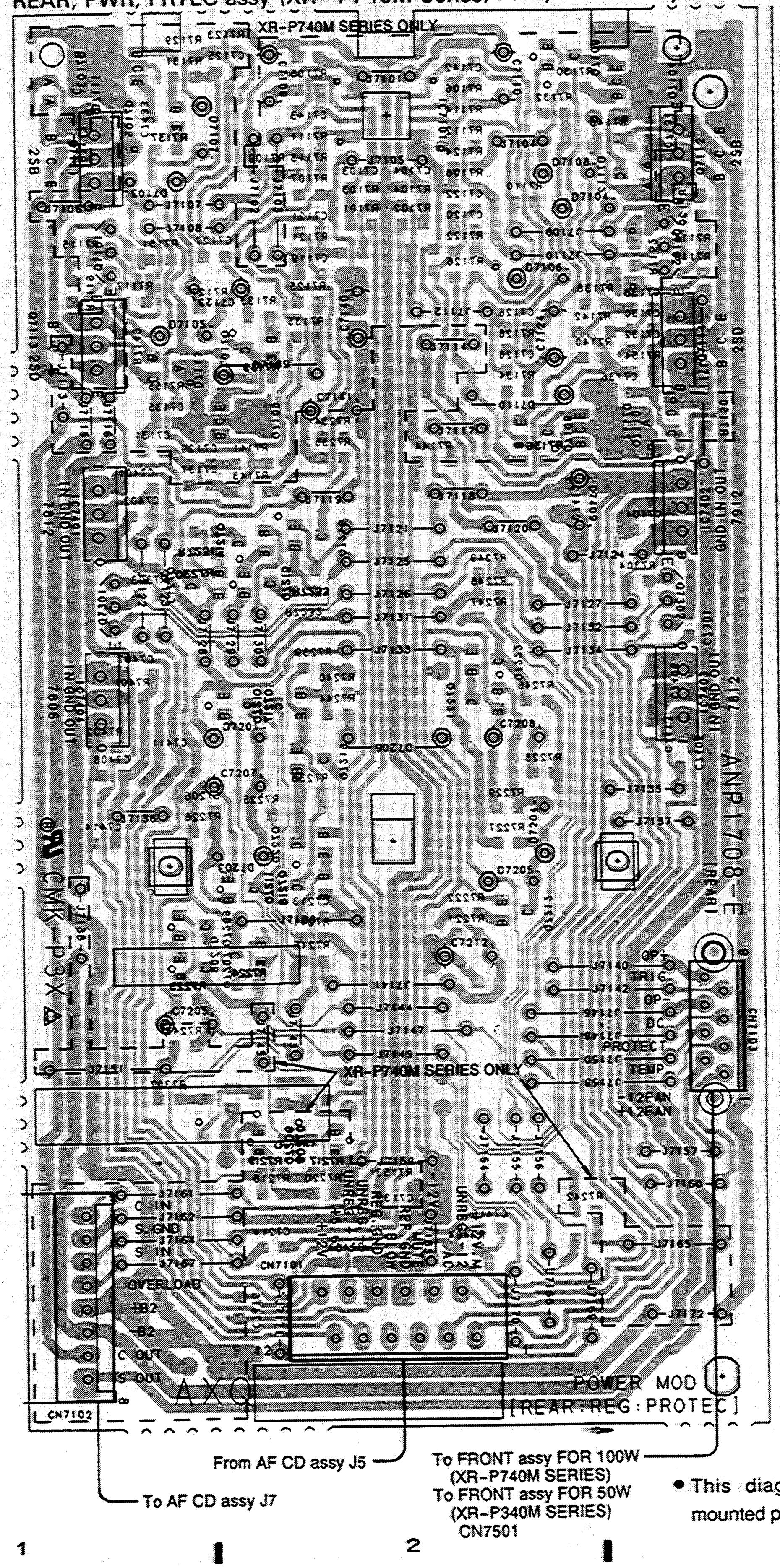
To AF CD assy J6

- This diagram is viewed from the mounted parts side.

6. REAR, PWR, PRTEC ASSY (XR−P740M Series) AND PWR, PRTEC ASSY (XR−P340M Series)

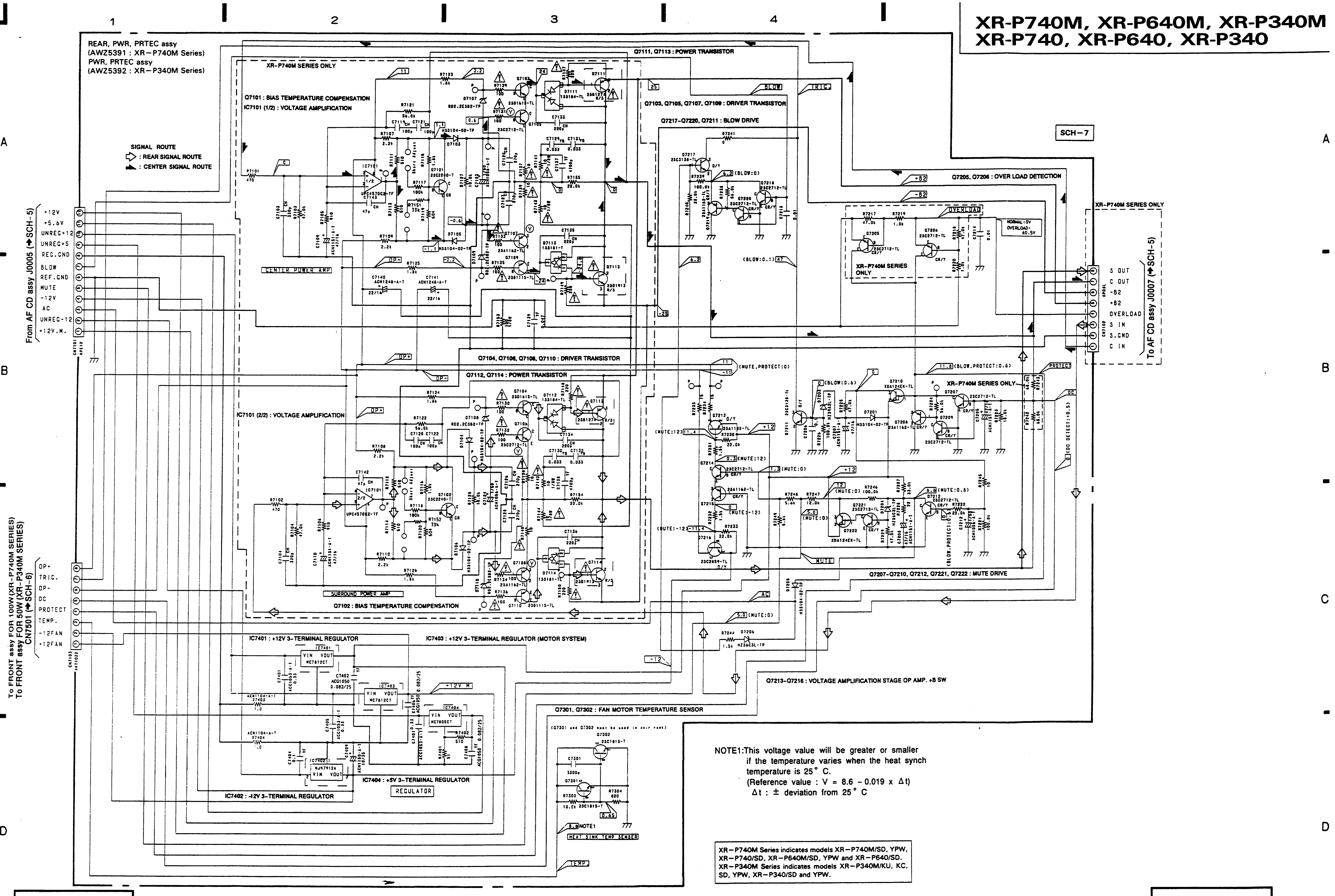
XR−P740M Series indicates models XR−P740M/SD, YPW, XR−P740/SD, XR−P640M/SD, YPW and XR−P640/SD.
XR−P340M Series indicates models XR−P340M/KU, KC, SD, YPW, XR−P340/SD and YPW.

REAR, PWR, PRTEC assy (XR−P740M Series) PWR, PRTEC assy (XR−P340M Series)


XR-P740M SERIES ONLY
ANP1708-E
[REAR]
CMK-P3X
POWER MOD
[REAR:REG:PROTEC]
AXQ
IN GND OUT
7812
7912
7808
OP
TRIG
DC
PROTECT
TEMP
−12FAN
+12FAN
C IN
S GND
S IN
OVERLOAD
+B2
−B2
C OUT
S OUT
CN7101
CN7102
CN7103
From AF CD assy J5
To AF CD assy J7
To FRONT assy FOR 100W (XR−P740M SERIES)
To FRONT assy FOR 50W (XR−P340M SERIES)
CN7501

Q7106
Q7103 Q7104
Q7105 IC7101
Q7111 Q7112
Q7101 Q7102
Q7113 Q7114
Q7107
Q7109 Q7108
Q7110
IC7401 IC7402
Q7214 Q7216
Q7213 Q7215
Q7301 Q7302
Q7222
IC7404 Q7221 IC7403
Q7210 Q7217
Q7219
Q7220
Q7211 Q7218
Q7207 Q7212
|
Q7209
Q7205
Q7206

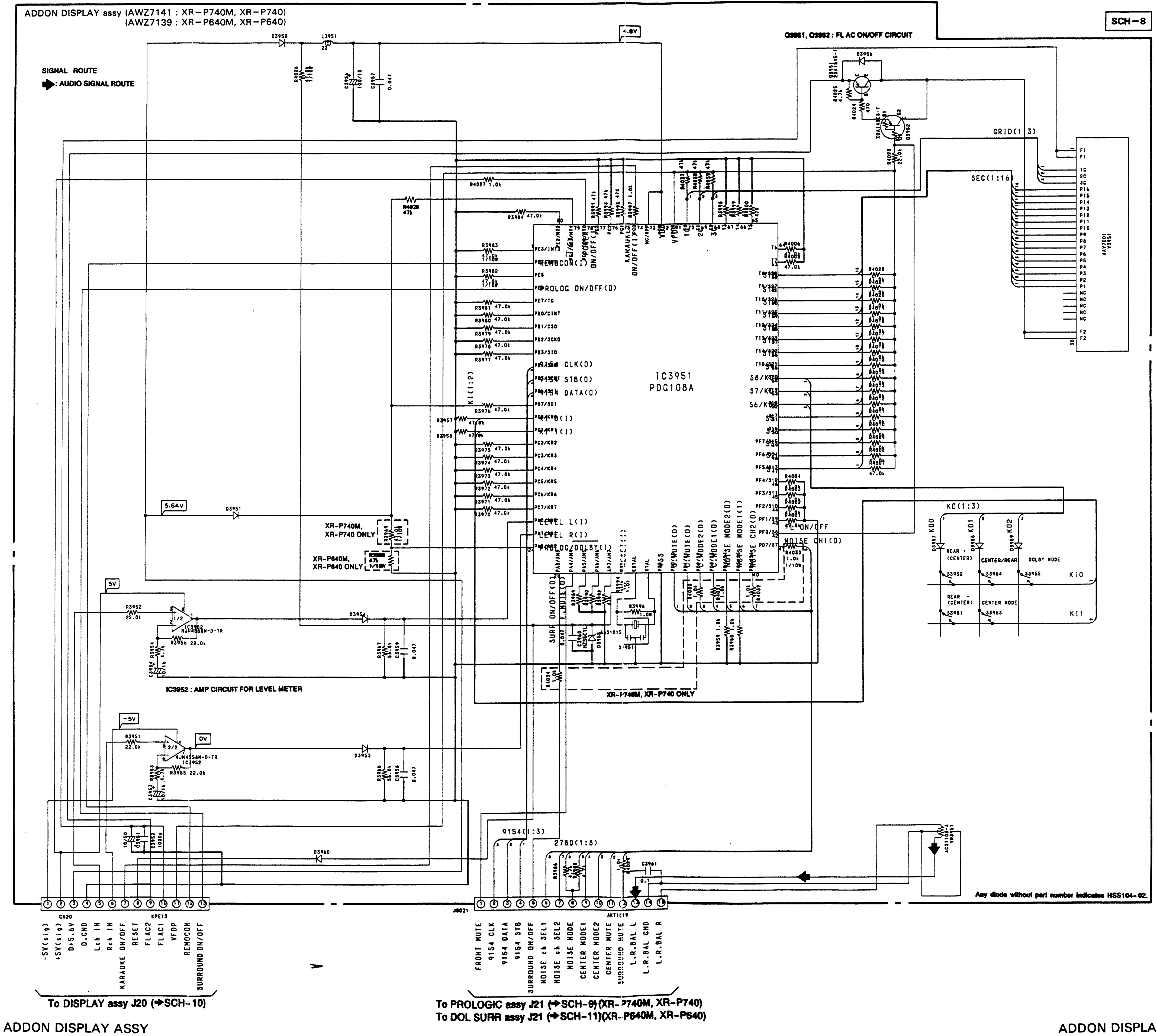
- This diagram is viewed from the mounted parts side.


REAR, PWR, PRTEC assy
(AWZ5391 : XR-P740M Series)
PWR, PRTEC assy
(AWZ5392 : XR-P340M Series)
XR-P740M SERIES ONLY
Q7101 : BIAS TEMPERATURE COMPENSATION
IC7101 (1/2) : VOLTAGE AMPLIFICATION
SIGNAL ROUTE
: REAR SIGNAL ROUTE
: CENTER SIGNAL ROUTE
Q7111, Q7113 : POWER TRANSISTOR
Q7103, Q7105, Q7107, Q7109 : DRIVER TRANSISTOR
Q7217-Q7220, Q7211 : BLOW DRIVE
SCH-7
Q7205, Q7206 : OVER LOAD DETECTION
OVERLOAD
NORMAL : 0V
OVERLOAD : ±0.5V
XR-P740M SERIES ONLY
CENTER POWER AMP
From AF CD assy J0005 (➜SCH-5)
+12V
+5.6V
UNREG+12
UNREG+5
REG.GND
BLOW
REF.GND
MUTE
-12V
AC
UNREG-12
+12V.M.
CN7101
S OUT
C OUT
-B2
+B2
OVERLOAD
S IN
S.GND
C IN
To AF CD assy J0007 (➜SCH-5)
Q7104, Q7106, Q7108, Q7110 : DRIVER TRANSISTOR
Q7112, Q7114 : POWER TRANSISTOR
IC7101 (2/2) : VOLTAGE AMPLIFICATION
XR-P740M SERIES ONLY
SURROUND POWER AMP
Q7102 : BIAS TEMPERATURE COMPENSATION
Q7207-Q7210, Q7212, Q7221, Q7222 : MUTE DRIVE
PROTECT
DC
MUTE
To FRONT assy FOR 100W (XR-P740M SERIES)
To FRONT assy FOR 50W (XR-P340M SERIES)
CN7501 (➜SCH-6)
OP+
TRIG.
OP-
DC
PROTECT
TEMP.
-12FAN
+12FAN
CN7103
IC7401 : +12V 3-TERMINAL REGULATOR
IC7403 : +12V 3-TERMINAL REGULATOR (MOTOR SYSTEM)
IC7404 : +5V 3-TERMINAL REGULATOR
IC7402 : -12V 3-TERMINAL REGULATOR
REGULATOR
Q7213-Q7216 : VOLTAGE AMPLIFICATION STAGE OP AMP. +B SW
Q7301, Q7302 : FAN MOTOR TEMPERATURE SENSOR
HEAT SINK TEMP SENSOR
8.8 NOTE1
TEMP
1
2
3
4
A
B
C
D

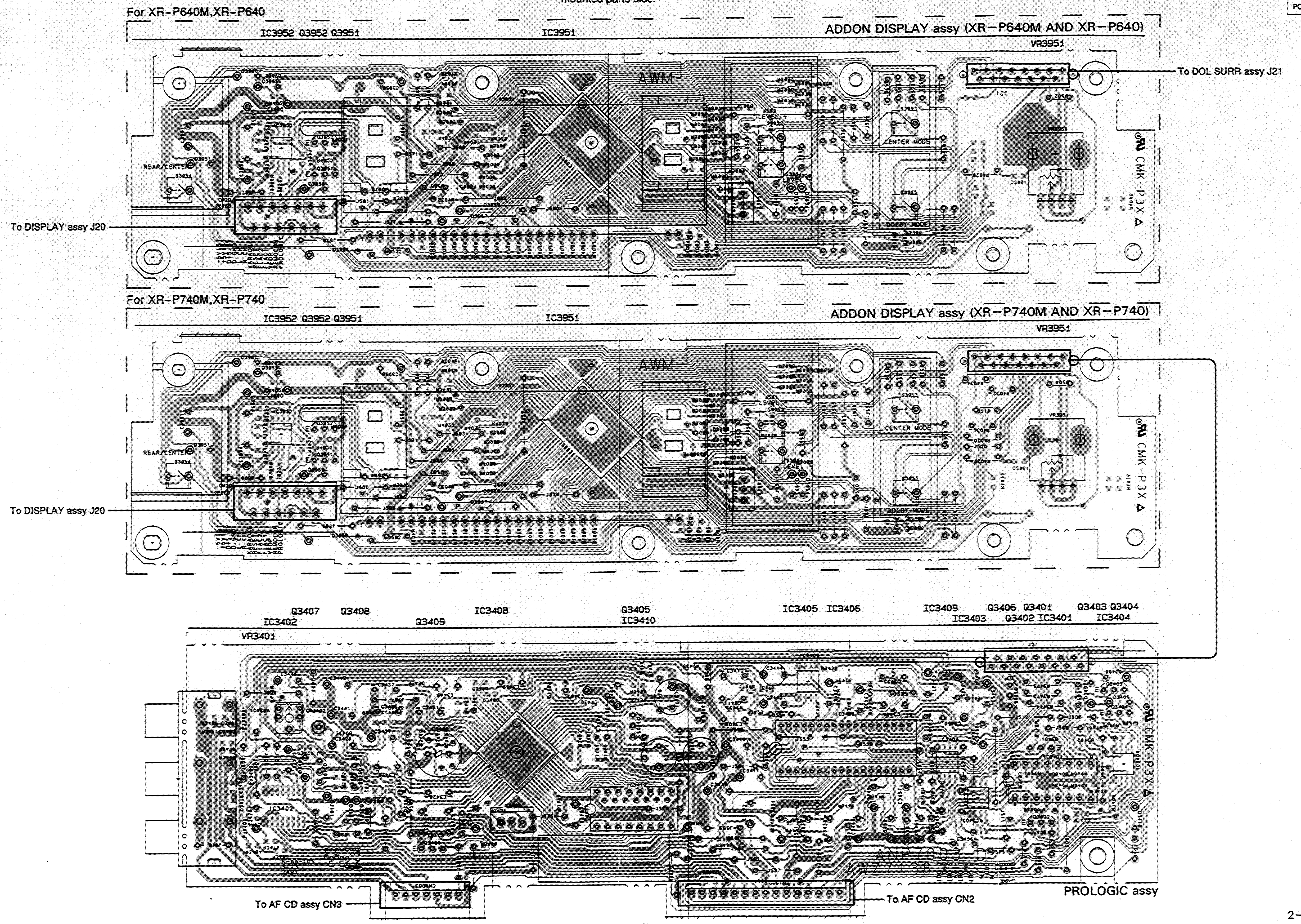
NOTE1:This voltage value will be greater or smaller
if the temperature varies when the heat synch
temperature is 25° C.
(Reference value : V = 8.6 - 0.019 x Δt)
Δt : ± deviation from 25° C

XR-P740M Series indicates models XR-P740M/SD, YPW, XR-P740/SD, XR-P640M/SD, YPW and XR-P640/SD.
XR-P340M Series indicates models XR-P340M/KU, KC, SD, YPW, XR-P340/SD and YPW.

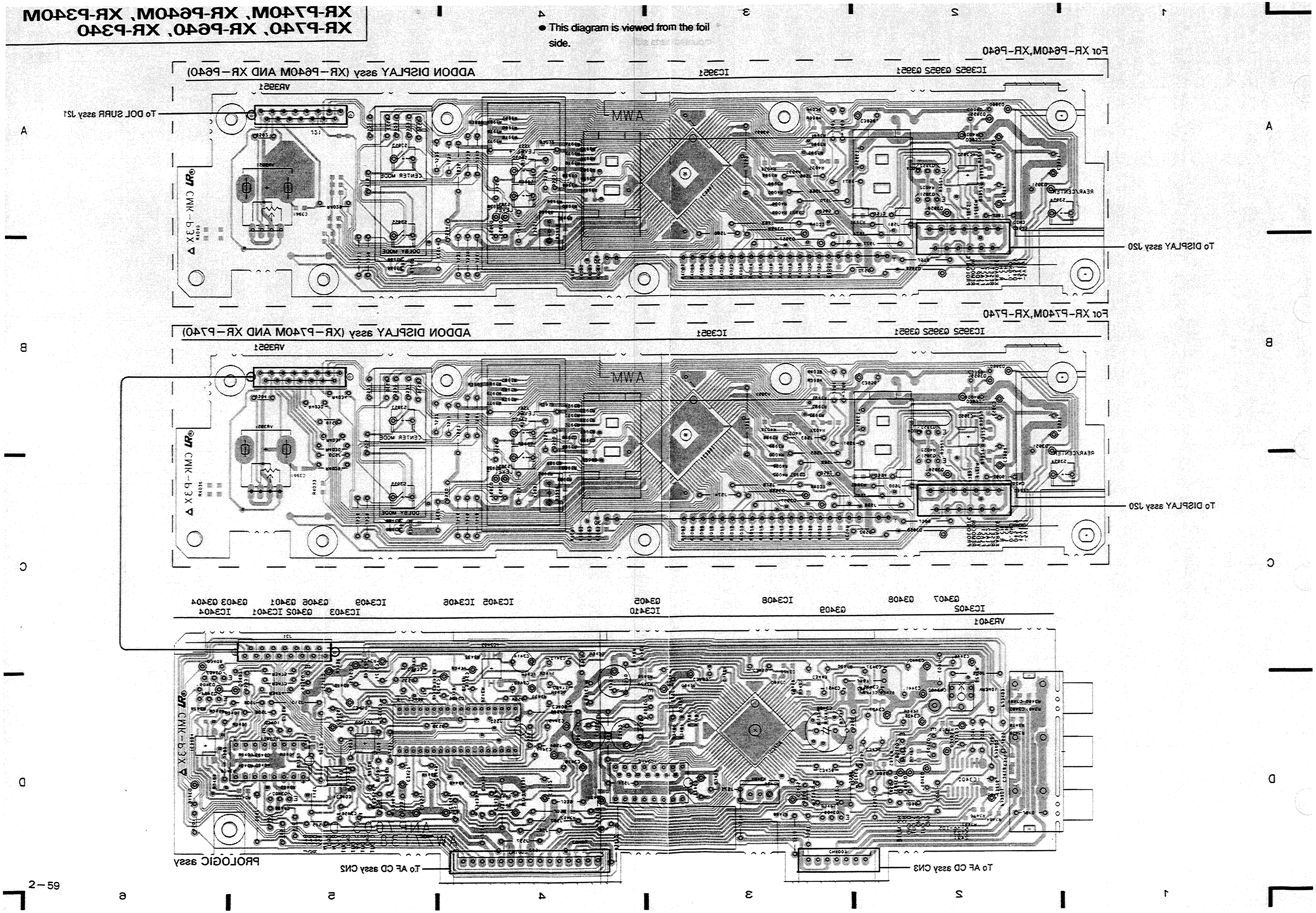
7. PROLOGIC ASSY AND ADDON DISPLAY ASSY


ADDON DISPLAY assy (AWZ7141 : XR−P740M, XR−P740)
(AWZ7139 : XR−P640M, XR−P640)
SCH−8
SIGNAL ROUTE
: AUDIO SIGNAL ROUTE
Q3951, Q3952 : FL AC ON/OFF CIRCUIT
GRID(1:3)
SEG(1:16)
IC3951
PDG108A
KI(1:2)
KO(1:3)
5.64V
5V
−5V
0V
XR−P740M, XR−P740 ONLY
XR−P640M, XR−P640 ONLY
IC3952 : AMP CIRCUIT FOR LEVEL METER
XR−P740M, XR−P740 ONLY
REAR + (CENTER)
CENTER/REAR
DOLBY MODE
REAR − (CENTER)
CENTER MODE
KI0
KI1
9154(1:3)
2780(1:8)
Any diode without part number indicates HSS104-02.
CN20
KPE13
J8021
AKT1C19
-5V(sig)
+5V(sig)
D+5.6V
D.GND
Lch IN
Rch IN
KARAOKE ON/OFF
RESET
FLAC2
FLAC1
VFDP
REMOCON
SURROUND ON/OFF
FRONT MUTE
9154 CLK
9154 DATA
9154 STB
SURROUND ON/OFF
NOISE ch SEL1
NOISE ch SEL2
NOISE MODE
CENTER MODE1
CENTER MODE2
CENTER MUTE
SURROUND MUTE
L.R.BAL L
L.R.BAL GND
L.R.BAL R
To DISPLAY assy J20 (➔SCH−10)
To PROLOGIC assy J21 (➔SCH−9)(XR−P740M, XR−P740)
To DOL SURR assy J21 (➔SCH−11)(XR−P640M, XR−P640)

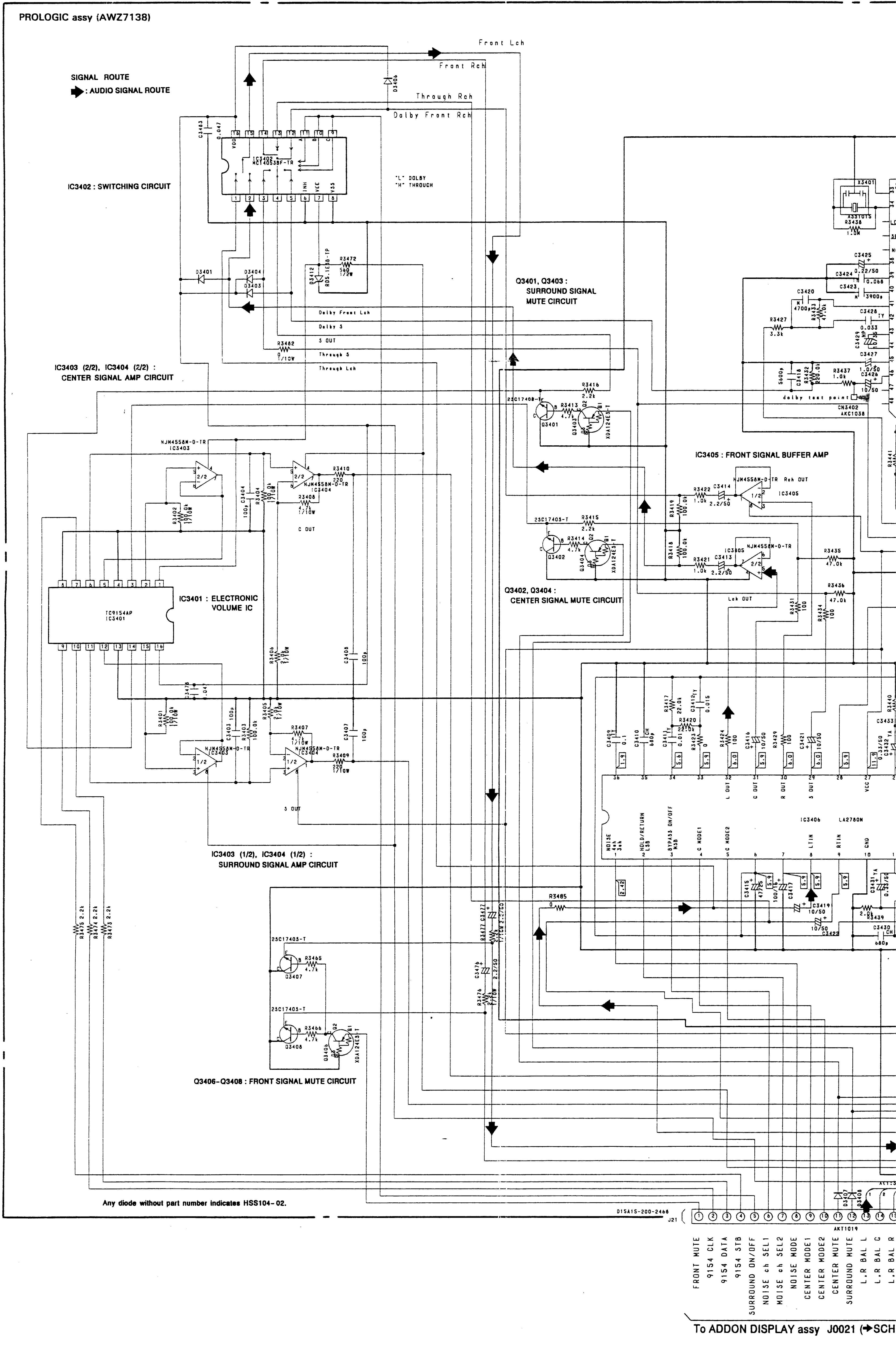
- This diagram is viewed from the mounted parts side.


For XR-P640M,XR-P640
IC3952 Q3952 Q3951
IC3951
ADDON DISPLAY assy (XR−P640M AND XR−P640)
VR3951
To DOL SURR assy J21
To DISPLAY assy J20
AWM
REAR/CENTER
CENTER MODE
DOLBY MODE
LEVEL
CMK-P3X
For XR-P740M,XR-P740
IC3952 Q3952 Q3951
IC3951
ADDON DISPLAY assy (XR−P740M AND XR−P740)
VR3951
To DISPLAY assy J20
Q3407
IC3402
Q3408
Q3409
IC3408
Q3405
IC3410
IC3405 IC3406
IC3409
IC3403
Q3406 Q3401
Q3402 IC3401
Q3403 Q3404
IC3404
VR3401
J21
IC3402
ANP7003-D
AWZ7138
To AF CD assy CN3
To AF CD assy CN2
PROLOGIC assy

- This diagram is viewed from the foil side.

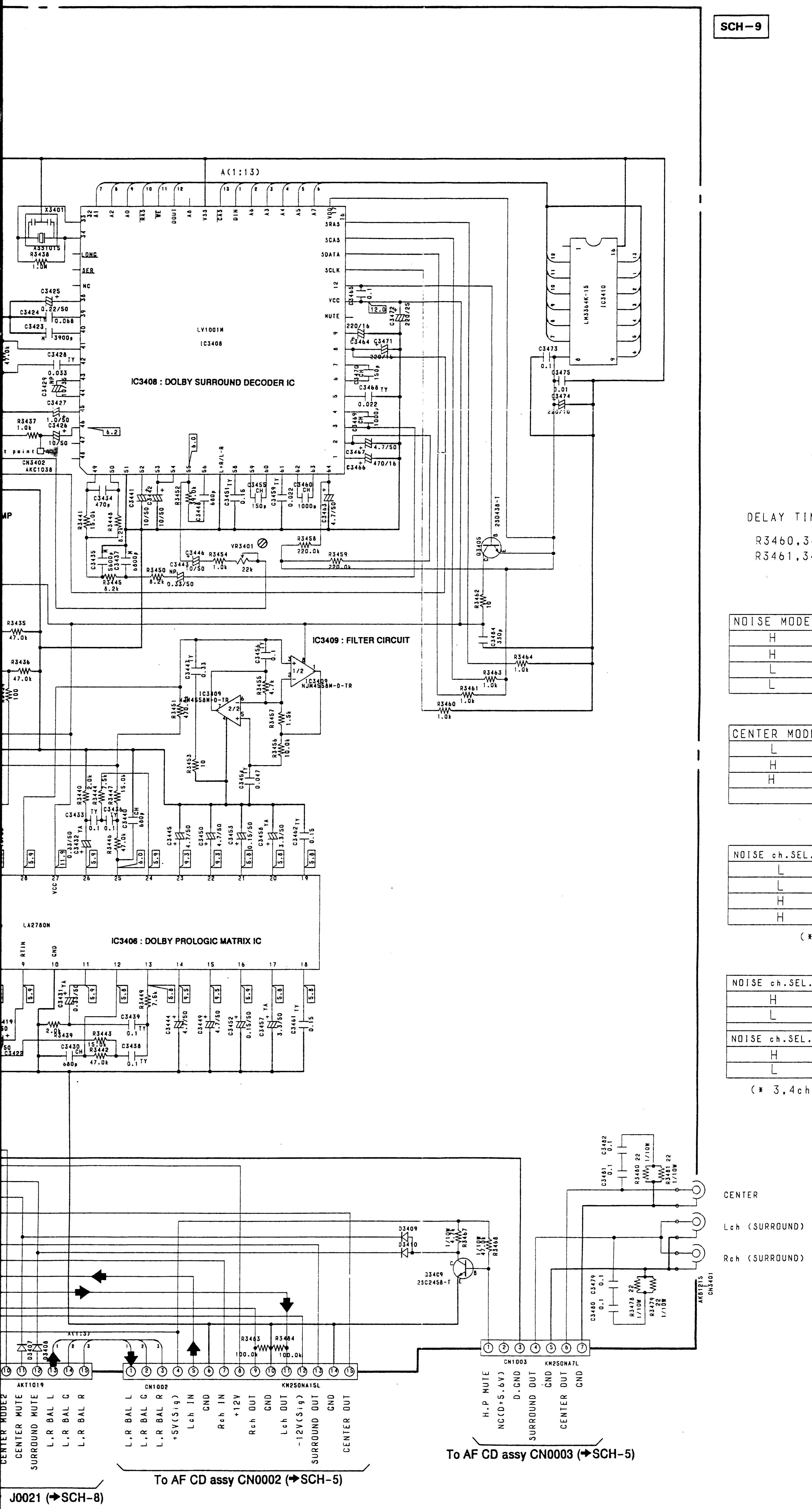

4
3
2
1
For XR-P640M,XR-P640
ADDON DISPLAY assy (XR-P640M AND XR-P640)
IC3951
IC3952 Q3952 Q3951
VR3951
To DOL SURR assy J21
CENTER MODE
DOLBY MODE
MWA
REAR/CENTER
To DISPLAY assy J20
CMK-P3X
A
For XR-P740M,XR-P740
ADDON DISPLAY assy (XR-P740M AND XR-P740)
IC3951
IC3952 Q3952 Q3951
VR3951
CENTER MODE
DOLBY MODE
MWA
REAR/CENTER
To DISPLAY assy J20
CMK-P3X
B
C
Q3404 Q3403 Q3401 Q3406 IC3409 IC3406 IC3405 Q3405 IC3408 Q3408 Q3407
IC3404 IC3401 IC3402 Q3402 IC3403 IC3410 Q3409 IC3402
VR3401
J21
CMK-P3X
PROLOGIC assy
To AF CD assy CN2
To AF CD assy CN3
D
6
5
4
3
2
1

For XR−P740M, XR−P740


PROLOGIC assy (AWZ7138)
SIGNAL ROUTE
: AUDIO SIGNAL ROUTE
IC3402 : SWITCHING CIRCUIT
IC3402 MC14053BF-TR
"L" DOLBY
"H" THROUGH
Front Lch
Front Rch
Through Rch
Dolby Front Rch
Dolby Front Lch
Dolby S
S OUT
Through S
Through Lch
Q3401, Q3403 : SURROUND SIGNAL MUTE CIRCUIT
IC3403 (2/2), IC3404 (2/2) : CENTER SIGNAL AMP CIRCUIT
IC3405 : FRONT SIGNAL BUFFER AMP
Rch OUT
Lch OUT
C OUT
S OUT
IC3401 : ELECTRONIC VOLUME IC
TC9154AP IC3401
Q3402, Q3404 : CENTER SIGNAL MUTE CIRCUIT
IC3403 (1/2), IC3404 (1/2) : SURROUND SIGNAL AMP CIRCUIT
Q3406–Q3408 : FRONT SIGNAL MUTE CIRCUIT
NJM4558M-D-TR
2SC1740S-T
XDA124ES-T
IC3406 LA2780N
dolby test point
CN3402 AKC1038
X3401
J21
AKT1019
D15A15-200-2466
FRONT MUTE
9154 CLK
9154 DATA
9154 STB
SURROUND ON/OFF
NOISE ch SEL1
NOISE ch SEL2
NOISE MODE
CENTER MODE1
CENTER MODE2
CENTER MUTE
SURROUND MUTE
L,R BAL L
L,R BAL G
L,R BAL R

Any diode without part number indicates HSS104-02.

To ADDON DISPLAY assy J0021 (→SCH


A(1:13)
X3401
R3438
1.0M
LONG
SER
NC
C3425
C3424
0.22/50
C3423
0.068
3900p
C3428
0.033
C3426
C3427
R3437
1.0k
1.0/50
10/50
6.2
t point
CN3402
AKC1038
A2
A0
RAS
WE
DOUT
A8
VSS
CAS
DIN
A6
A3
A4
A5
A7
VDD
3RAS
SCAS
SDATA
SCLK
VCC
MUTE
LY1001M
IC3408
IC3408 : DOLBY SURROUND DECODER IC
C3465
0.1
12.0
C3472
220/25
220/16
C3464
C3471
220/16
C3470
150p
C3468
0.022
C3469
1000p
C3467
4.7/50
C3466
470/16
6.0
L+R/L-R
C3434
470p
C3441
C3442
10/50
R3452
R3444
C3448
680p
C3451
0.15
C3455
150p
C3459
0.022
C3460
1000p
C3463
4.7/50
R3441
15.0k
R3448
6.2k
C3435
5600p
C3437
6800p
R3445
6.2k
R3450
8.2k
C3443
0.33/50
C3446
10/50
R3454
1.0k
22k
VR3401
R3458
220.0k
R3459
220.0k
C3473
0.1
C3475
0.01
C3474
220/10
LM3364K-15
IC3410
2SD438-1
Q3405
R3462
10
C3464
330p
R3464
1.0k
R3463
1.0k
R3461
1.0k
R3460
1.0k
R3435
47.0k
R3436
47.0k
100
IC3409 : FILTER CIRCUIT
C3458
0.1
C3447
0.33
R3455
4.7k
1/2
IC3409
NJM4558M-D-TR
IC3409
NJM4558M-D-TR
2/2
R3451
470
R3457
1.5k
R3456
10.0k
R3453
10
C3454
0.047
R3440
2.0k
R3444
7.5k
R3447
15.0k
C3433
C3436
0.1
C3440
680p
C3432
0.33/50
R3446
47.0k
C3445
4.7/50
C3450
4.7/50
C3453
0.15/50
C3458
3.3/50
C3462
0.15
5.9
11.8
5.9
6.0
5.9
9.3
9.3
5.8
5.8
5.8
VCC
LA2780N
IC3406 : DOLBY PROLOGIC MATRIX IC
RTIN
GND
5.9
5.9
5.8
5.8
9.5
9.5
5.9
5.8
5.8
C3431
0.33/50
R3449
7.5k
C3439
0.1
C3444
4.7/50
C3449
4.7/50
C3452
0.15/50
C3457
3.3/50
C3461
0.15
R3439
2.0k
R3443
15.0k
R3442
47.0k
C3430
680p
C3438
0.1
C3422
C3482
0.1
C3481
0.1
R3480
22
1/10W
R3481
22
1/10W
CENTER
Lch (SURROUND)
Rch (SURROUND)
D3409
D3410
R3467
1/10W
R3468
1/10W
Q3409
2SC2458-T
C3480
0.1
C3479
0.1
R3478
22
1/10W
R3479
22
1/10W
AKB1215
CN3401
D3407
D3408
R3463
100.0k
R3464
100.0k
AKT1019
CN1002
KM250NA15L
CN1003
KM250NA7L
CENTER MODE2
CENTER MUTE
SURROUND MUTE
L,R BAL L
L,R BAL C
L,R BAL R
L,R BAL L
L,R BAL C
L,R BAL R
+5V(Sig)
Lch IN
GND
Rch IN
+12V
Rch OUT
GND
Lch OUT
-12V(Sig)
SURROUND OUT
GND
CENTER OUT
H.P MUTE
NC(D+5.6V)
D.GND
SURROUND OUT
GND
CENTER OUT
GND
To AF CD assy CN0002 (→SCH-5)
To AF CD assy CN0003 (→SCH-5)
J0021 (→SCH-8)

DELAY TIME   20mS

R3460,3464 --- "L"
R3461,3463 --- "H"

NOISE MODE1	NOISE MODE2	
H	H	3ch
H	L	4ch
L	H	4ch
L	L	NOISE

CENTER MODE1	CENTER MODE2	
L	L	NORMAL
H	L	PHANTOM
H	H	OFF

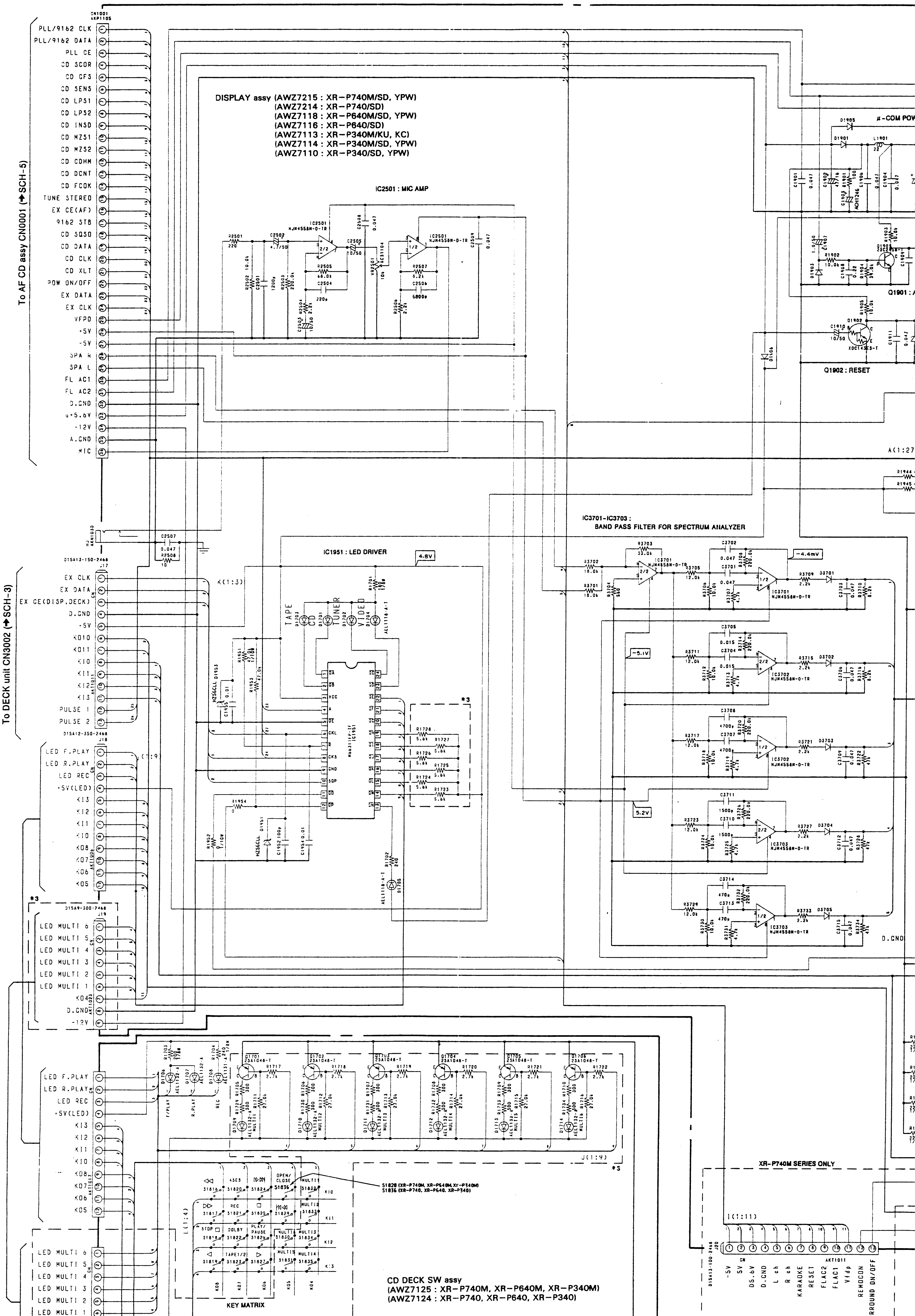
NOISE ch.SEL.1	NOISE ch.SEL.2	ch
L	L	Lch
L	H	Cch
H	L	Rch
H	H	Sch

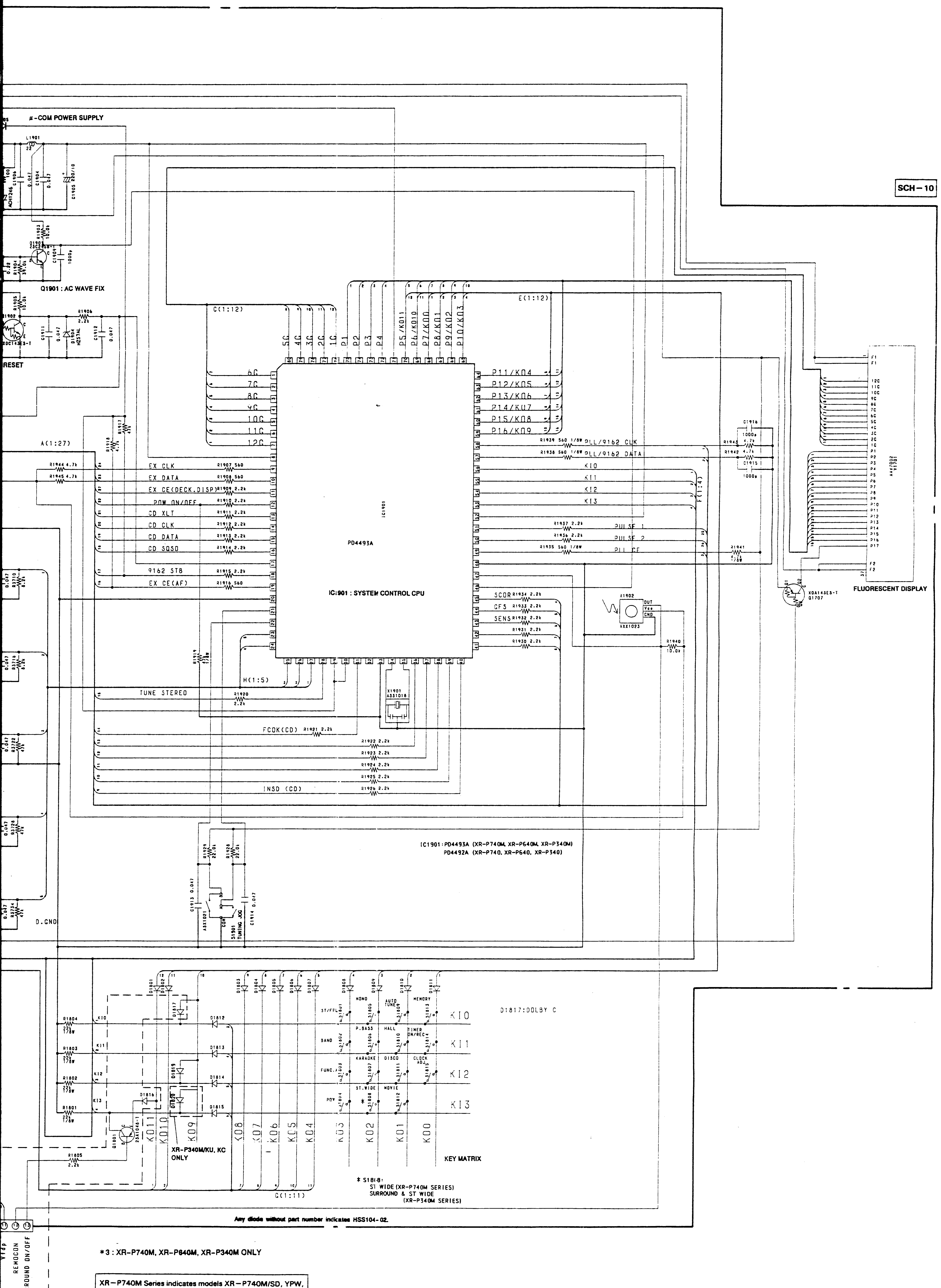
(* NOISE MODE)

NOISE ch.SEL.1	
H	BYPASS OFF
L	BYPASS ON
NOISE ch.SEL.2	
H	RETURN
L	HOLD

(* 3,4ch MODE)

8. DISPLAY ASSY AND CD DECK SW ASSY


CN1001 AKP1105
PLL/9162 CLK
PLL/9162 DATA
PLL CE
CD SCOR
CD GFS
CD SENS
CD LPS1
CD LPS2
CD INSD
CD MZS1
CD MZS2
CD CDHM
CD DCNT
CD FCOK
TUNE STEREO
EX CE(AF)
9162 STB
CD SQSO
CD DATA
CD CLK
CD XLT
POW ON/OFF
EX DATA
EX CLK
VFPD
+5V
-5V
SPA R
SPA L
FL AC1
FL AC2
D.GND
μ+5.6V
-12V
A.GND
MIC
To AF CD assy CN0001 (➔SCH-5)
DISPLAY assy (AWZ7215 : XR-P740M/SD, YPW)
(AWZ7214 : XR-P740/SD)
(AWZ7118 : XR-P640M/SD, YPW)
(AWZ7116 : XR-P640/SD)
(AWZ7113 : XR-P340M/KU, KC)
(AWZ7114 : XR-P340M/SD, YPW)
(AWZ7110 : XR-P340/SD, YPW)
IC2501 : MIC AMP
μ-COM POW
Q1901
Q1902 : RESET
A(1:27
IC3701-IC3703 :
BAND PASS FILTER FOR SPECTRUM ANALYZER
-4.4mV
-5.1V
5.2V
D.GND
IC1951 : LED DRIVER
4.8V
K(1:3)
TAPE
CD
TUNER
VIDEO
EX CLK
EX DATA
EX CE(DISP,DECK)
D.GND
+5V
K010
K011
K10
K11
K12
K13
PULSE 1
PULSE 2
To DECK unit CN3002 (➔SCH-3)
LED F.PLAY
LED R.PLAY
LED REC
+5V(LED)
K13
K12
K11
K10
K08
K07
K06
K05
*3
LED MULTI 6
LED MULTI 5
LED MULTI 4
LED MULTI 3
LED MULTI 2
LED MULTI 1
K04
D.GND
-12V
F/PLAY
R.PLAY
REC
J(1:9)
4SEC
OPEN/CLOSE
REC
STOP
DOLBY
PLAY/PAUSE
TAPE1/2
MULTI1
MULTI2
MULTI3
MULTI4
MULTI5
MULTI6
S1828 (XR-P740M, XR-P640M, XR-P340M)
S1836 (XR-P740, XR-P640, XR-P340)
K10
K11
K12
K13
K08
K07
K06
K05
L(1:4)
KEY MATRIX
CD DECK SW assy
(AWZ7125 : XR-P740M, XR-P640M, XR-P340M)
(AWZ7124 : XR-P740, XR-P640, XR-P340)
XR-P740M SERIES ONLY
I(1:11)
-5V
5V
D5.6V
D.GND
L ch
R ch
KARAOKE
RESET
FLAC2
FLAC1
Vfdp
REMOCON
SURROUND ON/OFF
To ADDON DISPLAY assy CN20 (➔SCH-8)


μ-COM POWER SUPPLY
L1901
ACH1246
Q1901 : AC WAVE FIX
R1906 2.2k
D1904 HZ5.7AL
RESET
A(1:27)
C(1:12)
E(1:12)
5G 4G 3G 2G 1G P1 P2 P3 P4 P5/K011 P6/K010 P7/K00 P8/K01 P9/K02 P10/K03
6G 7G 8G 9G 10G 11G 12G
P11/K04 P12/K05 P13/K06 P14/K07 P15/K08 P16/K09
PLL/9162 CLK
PLL/9162 DATA
K10 K11 K12 K13
PULSE 1
PULSE 2
PLL CE
F(1:4)
EX CLK
EX DATA
EX CE(DECK.DISP)
POW ON/OFF
CD XLT
CD CLK
CD DATA
CD SQSO
9162 STB
EX CE(AF)
IC1901
PD4493A
IC1901 : SYSTEM CONTROL CPU
SCOR
CFS
SENS
X1902
OUT
Vcc
GND
AXX1023
H(1:5)
TUNE STEREO
X1901
ASS1018
FCOK(CD)
INSO (CD)
IC1901:PD4493A (XR-P740M, XR-P640M, XR-P340M)
PD4492A (XR-P740, XR-P640, XR-P340)
S1901 TUNING JOG
AXX1021
D.GND
F1 F1
12G 11G 10G 9G 8G 7G 6G 5G 4G 3G 2G 1G
P1 P2 P3 P4 P5 P6 P7 P8 P9 P10 P11 P12 P13 P14 P15 P16 P17
F2 F2
AAV7002
Q1707
XDA143ES-T
FLUORESCENT DISPLAY
SCH-10
D1817:DOLBY C
MONO
MEMORY
AUTO TUNE
ST/FFL
P.BASS
HALL
TIMER ON/REC
BAND
KARAOKE
DISCO
CLOCK ADJ
FUNC.
ST.WIDE
MOVIE
POW
K10
K11
K12
K13
K011 K010 K09 K08 K07 K06 K05 K04 K03 K02 K01 K00
XR-P340M/KU, KC ONLY
KEY MATRIX
* S1808:
ST WIDE (XR-P740M SERIES)
SURROUND & ST WIDE (XR-P340M SERIES)
G(1:11)
Any diode without part number indicates HSS104-02.
V1dp
REMOCON
SURROUND ON/OFF
→SCH-8)

*3 : XR-P740M, XR-P640M, XR-P340M ONLY

XR-P740M Series indicates models XR-P740M/SD, YPW, XR-P740/SD, XR-P640M/SD, YPW and XR-P640/SD.
XR-P340M Series indicates models XR-P340M/KU, KC, SD, YPW, XR-P340/SD and YPW.

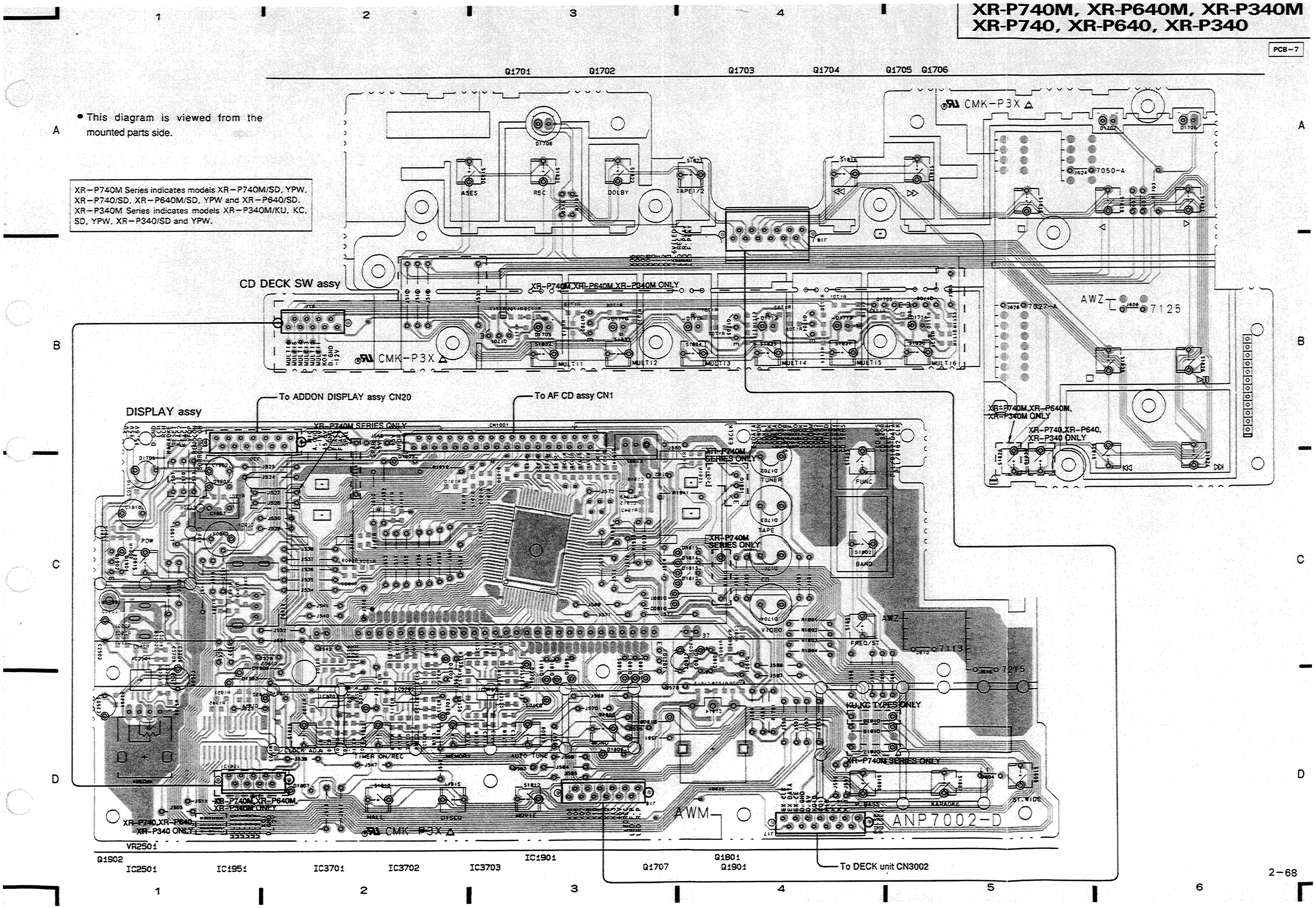
SCH-10

DISPLAY ASSY, CD DECK SW ASSY

PCB-7

- This diagram is viewed from the mounted parts side.

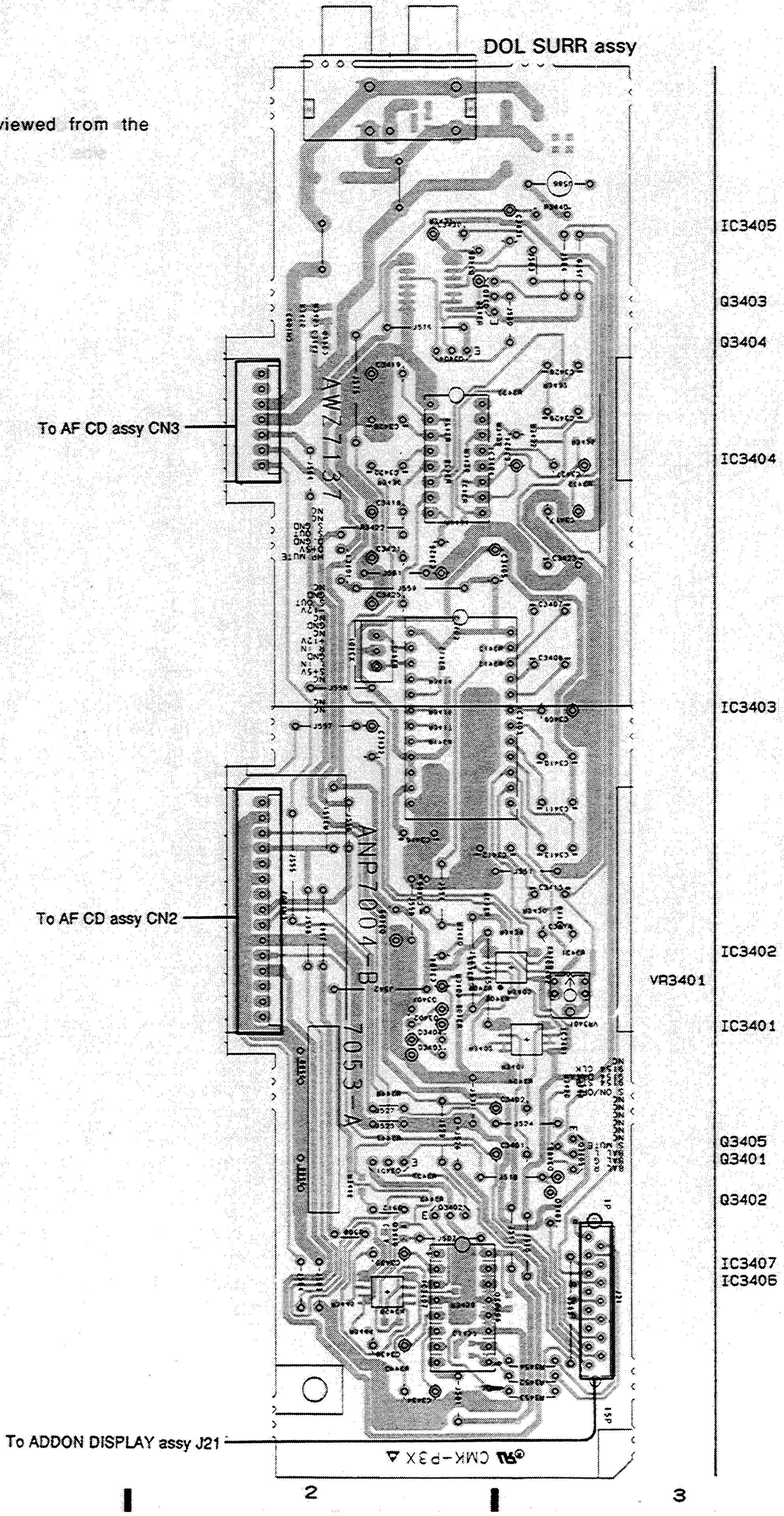
XR−P740M Series indicates models XR−P740M/SD, YPW, XR−P740/SD, XR−P640M/SD, YPW and XR−P640/SD.
XR−P340M Series indicates models XR−P340M/KU, KC, SD, YPW, XR−P340/SD and YPW.


1
2
3
4
5
6
A
B
C
D
Q1701
Q1702
Q1703
Q1704
Q1705
Q1706
CMK-P3X
D1708
ASES
REC
DOLBY
TAPE1/2
D1707
D1706
7050-A
CD DECK SW assy
XR-P740M,XR-P640M,XR-P340M ONLY
MULTI1
MULTI2
MULTI3
MULTI4
MULTI5
MULTI6
AWZ
7125
7027-A
To ADDON DISPLAY assy CN20
To AF CD assy CN1
DISPLAY assy
XR-P740M SERIES ONLY
XR-P740M,XR-P640M,
XR-P340M ONLY
XR-P740,XR-P640,
XR-P340 ONLY
TUNER
TAPE
CD
VIDEO
FUNC
BAND
FREQ/ST
7113
7215
POW
XR-P740M SERIES ONLY
KU,KC TYPES ONLY
CLOCK ADJ
TIMER ON/REC
MEMORY
AUTO TUNE
MONO
HALL
DISCO
MOVIE
P.BASS
KARAOKE
ST.WIDE
AWM
ANP7002-D
To DECK unit CN3002
VR2501
Q1902
IC2501
IC1951
IC3701
IC3702
IC3703
IC1901
Q1707
Q1801
Q1901

9. DOL SURR ASSY

A

- This diagram is viewed from the mounted parts side.

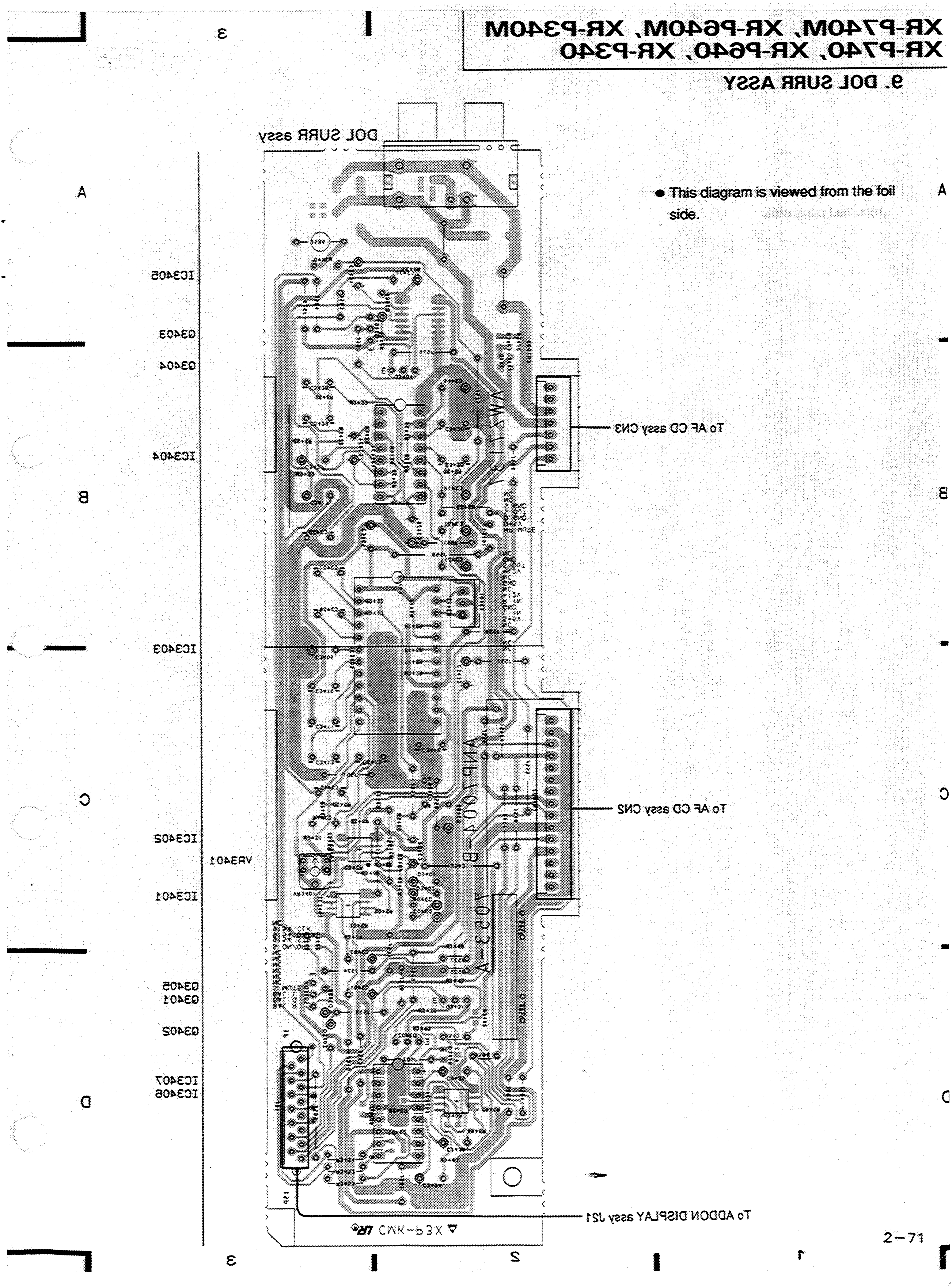

DOL SURR assy
To AF CD assy CN3
To AF CD assy CN2
To ADDON DISPLAY assy J21
IC3405
Q3403
Q3404
IC3404
IC3403
IC3402
VR3401
IC3401
Q3405
Q3401
Q3402
IC3407
IC3406
AWZ7137
ANP7004-B 7053-A
CMK-P3X

A B C D

A B C D

9. DOL SURR ASSY

- This diagram is viewed from the foil side.


3
2
1
A
B
C
D
DOL SURR assy
IC3405
Q3403
Q3404
IC3404
IC3403
IC3402
VR3401
IC3401
Q3405
Q3401
Q3402
IC3407
IC3406
To AF CD assy CN3
To AF CD assy CN2
To ADDON DISPLAY assy J21
ANP7407-B
A-C057
△ XEK-PWC